Oracle SCM Cloud
Using Demand Management

Release 13 (update 18C)
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Preface

This preface introduces information sources that can help you use the application.

Using Oracle Applications

Using Applications Help

Use help icons ⚫ to access help in the application. If you don’t see any help icons on your page, click your user image or name in the global header and select Show Help Icons. Not all pages have help icons. You can also access Oracle Applications Help.

Watch: This video tutorial shows you how to find help and use help features.

You can also read Using Applications Help.

Additional Resources

- **Community**: Use Oracle Cloud Customer Connect to get information from experts at Oracle, the partner community, and other users.

- **Guides and Videos**: Go to the Oracle Help Center to find guides and videos.

- **Training**: Take courses on Oracle Cloud from Oracle University.

Conventions

The following table explains the text conventions used in this guide.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Meaning</th>
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<tbody>
<tr>
<td><strong>boldface</strong></td>
<td>Boldface type indicates user interface elements, navigation paths, or values you enter or select.</td>
</tr>
<tr>
<td><strong>monospace</strong></td>
<td>Monospace type indicates file, folder, and directory names, code examples, commands, and URLs.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Greater than symbol separates elements in a navigation path.</td>
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Documentation Accessibility

For information about Oracle’s commitment to accessibility, visit the Oracle Accessibility Program website.

Videos included in this guide are provided as a media alternative for text-based help topics also available in this guide.
Contacting Oracle

Access to Oracle Support
Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit My Oracle Support or visit Accessible Oracle Support if you are hearing impaired.

Comments and Suggestions
Please give us feedback about Oracle Applications Help and guides! You can send an e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.
### 1 Demand Management Overview

#### Demand Management: Overview

Oracle Demand Management Cloud is a modern and comprehensive supply chain planning solution for accurately sensing, predicting, and shaping customer demand for a broad range of industries. It enables you to perform an end to end demand planning process. In the process, you gain the ability to load and review historical demand, such as shipments, bookings, or an user-defined demand stream.

Demand Management allows you to perform the following:

- Manage multiple demand streams and analyze their inherent behavior.
- Create precise statistical forecasts, determine causal factors impacts, and measure forecast accuracy.
- Optimize new product introductions and synchronize cross-functional demand plans.

You can leverage Demand Management to:

- Include a variety of both internal and external demands relevant for your industry.
- View and compare the demand streams in a consistent unit or currency of your choice at any level in the hierarchy. Various internal sales and marketing stakeholders as well as your key customers can access the same information but tailored to their specific needs.
- Understand demand trends and relative contribution of various demand streams to enable revenue growth programs for specific products or product categories.
- Monitor changes in demand streams real-time using exceptions and thresholds to understand recent customer behavior and initiate suitable remedial action. This allows you to get better and more timely visibility to changes in customer demand.

#### Related Topics

- Managing Plans: Explained

### Supply Chain Planning Work Areas: Explained

The Oracle Supply Chain Planning Cloud solution is comprised of products designed for specific supply chain planning business processes and tasks. You perform these processes and tasks using work areas. Each of the Supply Chain Planning products provides access to one or more work areas.

The Supply Chain Planning work areas that you can use are determined by these factors:

- The products that your enterprise has licensed and configured
- The security privileges assigned to your user account

To use the Supply Chain Planning work areas, you must be aware of the following points:

- Navigation to work areas
- List of Supply Chain Planning work areas and the products to which they are applicable
Navigation to Work Areas

You can use different paths to navigate to a specific work area including:

- From the Navigator: You click the Navigator icon to see the work areas you have access to. The Supply Chain Planning work areas are listed within the Supply Chain Planning heading. The work area names are links. You click a specific work area link to access that work area.
- From the Springboard: On your home page you may have one or more springboard icons that represent a group of work areas, such as the group of Supply Chain Planning work areas. Click on the Supply Chain Planning springboard to access a set of icons, each of which represents a specific Supply Chain Planning work area. You click a specific icon to access that work area.

List of Supply Chain Planning Work Areas

The following table lists the Supply Chain Planning work areas and the Supply Chain Planning products that are applicable to each of the work areas.

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<td>Oracle Fusion Global Order Promising</td>
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<td>Demand Management</td>
<td>Oracle Fusion Demand Management</td>
</tr>
<tr>
<td>Supply Planning</td>
<td>Oracle Fusion Supply Planning</td>
</tr>
<tr>
<td>Demand and Supply Planning</td>
<td>Both of these products must be configured:</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Demand Management</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Supply Planning</td>
</tr>
<tr>
<td>Planning Central</td>
<td>Oracle Fusion Planning Central</td>
</tr>
<tr>
<td>Sales and Operations Planning</td>
<td>Oracle Fusion Sales and Operations Planning</td>
</tr>
<tr>
<td>Plan Inputs</td>
<td>You can use the Plan Inputs work area to perform tasks that do not require creating or accessing a plan. This work area is applicable to these products, in addition to the product-specific work areas:</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Demand Management</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Supply Planning</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Planning Central</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Sales and Operations Planning</td>
</tr>
<tr>
<td></td>
<td>- Oracle Fusion Global Order Promising</td>
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Related Topics

- The Supply Planning Work Area: Explained
- The Planning Central Work Area: Explained
The Demand Management Work Area: Explained

You use the Demand Management work area to configure, view, and analyze your real world demand planning processes. You can use the Demand Management work area to do the following:

- View multiple plans and plan inputs simultaneously.
- Use predefined page layouts or create user-defined page layouts to view plan data tailored for your business.
- Create multiple-pane page layouts tailored to your business processes.

To access the Demand Management work area and open a plan:

1. In the Navigator, click the **Demand Management** work area link.
2. Click the **Plans** drawer, and then expand Plans.
3. Select a plan, from the Actions menu, click **Open**.

Alternatively, you can right-click a plan and click **Open**.

Your plan by default opens in the Edit Plan page. This page consists of two main areas:

- Header
- Configurable pane

**Header**

The header area contains the page layout information and actionable buttons, such as Save Layout, Change, Open, Actions, Save, and Cancel. The header displays the plans, simulation sets, and plan inputs that are currently opened.

**Configurable Pane**

You can display the content of your plan in the configurable pane area which is located below the header. You can add one to four panes on the page to display your content. The Page Layout drop-down list in the header area determines the number of panes in your planning interface page.

**Working with Page Layouts: Explained**

You can create and manage your page layouts. Use the Manage Page Layout action to modify the properties of your existing page layouts. You access a plan interface page by opening a plan from the Plans section of the Tasks drawer in the Demand Management work area.

This topic discusses the following:

- Creating a page layout
- Editing a page layout
- Managing a page layout
Using the Demand Plan Summary page layout

Note: The application comes with predefined page layouts, which you can use as reference to create your business-specific layouts.

Creating a Page Layout

Page layouts are reusable across plans, simulation sets, and plan inputs. You can create page layouts or copy and then edit a page layout to create page layouts that are tailored to specific business needs.

To create a page layout:

1. In the Navigator, click the Demand Management work area link.
2. Click the Plans drawer tab.
3. In the Plans panel drawer, expand Plans list.
   
   Open a plan for which you want to create a page layout.
4. From the header section, select the Page Layout drop-down list, and click Create.
5. Specify the following details in the Create Page Layout dialog box:
   
   ◦ Page layout name and description
   ◦ Select one of the following access levels:
     
     • Public to make the page layout accessible for all users
     • Private to restrict the page layout to yourself
6. Click Save and Close.
   
   This creates a page layout with an empty pane.
7. Click the Change button to select a pane layout for your page layout.
   
   For example, select Two Pane, Horizontal Split layout.
8. Click the Open button and select a pane. Add content to the pane by selecting a table, graph, or tile set from the displayed list.
9. Click Save Layout.
   
   Repeat the procedure when you want to create more layouts with other panes.

Editing a Page Layout

You can edit an existing page layout in two ways:

• Use the Save Layout button to save the current page layout as it is currently displayed. For example, you can change an existing one pane layout to two pane layout. The next time you use this page, the layout appears as a two pane layout.
• You can also change a page layout using the Manage action from the Page Layout drop-down list.
• You cannot edit the predefined page layouts. You can copy and then edit the copied page layout.
Managing a Page Layout
You can use Manage Page Layout to perform the following:

- Edit the page layouts that you created. You can move one pane to other using Manage page layouts. However, if you are using a public page layout, where you are not the owner, then you cannot make changes to the layout. You can only set the layout to your default layout.
- Change the layout that is used as your default layout when you open a plan, simulation set, or plan inputs.
- Delete layouts that you created, when they are not in use and no longer needed.

Using the Demand Plan Summary Layout
Demand Plan Summary is a predefined page layout with Two Pane, Horizontal Split that contains a set of infotiles and high-level graphics you can use to review the business value of a plan.

Using the Demand Plan Summary layout, you can do the following:

- Measure the performance of a plan.
- Review plan information through the individual Key Performance Indicators (KPIs).
- Perform plan analysis using the contextual based navigation.
- Copy and configure the components of the Demand Plan Summary page layout for your specific need.

The structure of the Demand Plan Summary layout is a predefined set of infotiles. Using infotiles you can view the key metrics of your plan. You can drill to the predefined analytics for each of the infotiles by clicking on the bar at the bottom of the infotile. The infotiles are:

- Shipments History Comparison
- Shipments Forecast MAPE
- New Product Forecast
- Forecast Comparison
- Budget vs Plan

Supply Chain Planning Plan Types: Explained
When you create a plan, plan type is the first choice that you make. After you run a plan, you cannot edit the plan type.

Supply Chain Planning provides the following types of plans, which you can create, edit, run, and so on, depending on the work area that you have access to:

- Demand Plan: Use this plan type when you want to perform collaborative and statistical demand forecasting. It can also be used as a demand schedule for a supply plan. You can create a Demand Plan from the Planning Central work area and Demand Management work area only. You cannot create a Demand Plan in the Supply Planning work area.
- Supply Plan: Use this plan type when you want to generate a supply schedule. You can create a Supply Plan from the Planning Central work area and Supply Planning work area only. You cannot create a Supply Plan in the Demand Management work area.
• Demand and Supply Plan: Use this plan type when you want to perform planning and forecasting in a single plan. You can create a Demand and Supply Plan from the Planning Central work area and Demand and Supply Planning work area only.

• Sales and Operations Plan: Use this plan type for aggregate planning. You can create this plan from the Sales and Operations Planning work area.

Related Topics
• Managing Plans: Explained

Defining Planners for Supply Chain Planning: Explained

Planners are the people in your organization who are responsible for a set of items, their inventory levels, supply and demand, and so forth. For example, some typical titles of planners are Material Planner, Supply Chain Planner, and Demand Planner. All supply chain planning products use planners. You can define a specific person as a supply chain planner for the Oracle Fusion source system or for any other source system. You can also associate a planner to an item at the organization level.

Use the ScpPlannersImportTemplate.xlsm to create the CSV file for the Load Planning Data from Files task for planners. You can also use the Manage Planners page to define supply chain planners for each source system. Access the Manage Planners page from a Supply Chain Planning work area. Click the Tasks panel drawer and then click Manage Planners.

For Oracle Fusion source systems, associate the employee identification number with the planner name because Oracle Fusion Purchasing requires a valid employee identification number. When a planner releases a planned order, purchasing checks the employee identification number before creating the purchase requisition.

For external source systems, determine if the employee identification number is required when releasing planned orders. If required, use the Manage Planners page to associate the planner with their employee identification number. Or, you can use the ScpPlannersImportTemplate.xlsm template to associate the employee identification number with the planner name.

Use Oracle Fusion Product Hub to assign planners at the item-organization level. During data collections, the planning processes collect the planner-item-organization assignment. Planners can then use the planner name to search the data on most of the demand and supply planning pages.

Assigning Time Zones to Locations: Explained

You can view supplies and demands in your Supply Chain Planning work area based on the time zone of the organization, customer site, or supplier site. In addition, you can calculate precise in-transit time because supply chain planning considers the time zone difference between the source and destination locations.

The following points discuss in detail how you can collect time zone details and view orders depending on the locations' time zone:

• Update Time Zones Using Data Collections
• Assign Time Zones in Supply Network Model
• Calculate In-Transit Time
• View Time Zones in Supplies and Demands
• Release to Execution
Update Time Zones Using Data Collections

Use data collections to update organizations, customer site, or supplier site time zones. You can update the time zone in one of following three ways:

- Collect the organization’s time zone from an Oracle Fusion source system.
- Collect time zones from an external source system using the organization, customer, and supplier import templates.
- Update the time zone on Customers and Suppliers tabs of the Maintain Supply Network Model page.

If you are collecting from an Oracle Fusion source system, then you can update the organization’s time zone using the data collections method only. You cannot manually update the organization’s time zone using the Maintain Supply Network Model page in your Supply Chain Planning work area.

Assign Time Zones in Supply Network Model

Before collecting time zones or converting time zones to a local time, you must first assign time zones to organizations, customer sites, and supplier sites. A new time zone field is available on the Organizations, Customers, and Suppliers tab of the Maintain Supply Network Model page in your Supply Chain Planning work area.

You cannot collect customer site and supplier site time zones from an Oracle Fusion source system. To update the customer site or supplier site time zone, use one of the following options:

- Use the customer or supplier import template to update the customer site or supplier site time zone. You can also use this template if you are collecting from an external source system.
- Update the customer site and supplier site time zones directly in the Maintain Supply Network Model page.

When you recollect new customer and supplier data from an Oracle Fusion source system, the existing customer site and supplier site time zone information is preserved. If you do not collect or update the customer site or supplier site time zone, then planning calculations assume that the customer site or supplier site is located in the same time zone as the organization that is associated with the demand or supply.

When you collect the supplies and demands, collections automatically convert the associated dates from the database server time zone (Coordinated Universal Time or UTC) to the local time zone based on where the event takes place. In addition, when you collect shipments and booking history from the Oracle Fusion source system for use in the Demand Management or the Demand and Supply Planning work area, collections converts the historical data from the database server time zone (UTC) to the associated organization’s time zone.

Calculate In-Transit Time

When calculating in-transit times, supply chain planning considers the time zone difference between the shipping and receiving locations. The following example shows how supply chain planning calculates the in-transit time. In this example, the customer site is located in Sydney (UTC+10) and the shipping organization is in Sacramento, California (UTC-8).

1. When planning collects a sales order with a requested arrival date of 25-March-2018, 21:00 (UTC) on the database server, the requested arrival date is offset to the customer site's time zone. The customer site's time zone is Sydney time zone (UTC+10 hours). The requested arrival date becomes 26-March-2018, 7:00 in plan inputs (Sydney time zone).
2. When you run the plan with the Refresh with current data option, the sales order is included in the plan and supply chain planning uses this date to calculate the scheduled ship date.
3. Consider the in-transit time for the selected shipping method (Air Freight) is 36 hours. Supply chain planning first calculates the scheduled ship date as 25-March-2018, 19:00 hours (Sydney time) and then converts the date to the Sacramento time. The product is shipped from Sacramento. The time zone difference is applied to the scheduled
ship date by subtracting 18 hours. The scheduled ship date becomes 25-March-2018, 1:00 Sacramento time, which is used to generate the pegged supplies.

4. After completing the calculations, supply chain planning moves all the dates to the end of the day. All dates have the time stamp of 23:59:00. The time stamp is not available on the UI, but you can query the time stamp from the planning database.

Supply chain planning makes similar in-transit calculations when shipping supplies from a supplier site to an organization, or when transferring product from one organization to another.

View Time Zones in Supplies and Demands

On the Supplies and Demands page, use the following three columns to view supplies and demands in relation to the time zone:

- Organization Time Zone
- Source Time Zone
- Destination Time Zone

The columns are not included in any predefined table layout. Create a user-defined table layout and include these columns in your table.

To display supply and demand measure values within a table such as Material Plan or Build Plan, supply chain planning assigns the measure value to the day based on the organization’s local time zone. The supply and demand measure value is not assigned to a date based on a common time zone.

Release to Execution

When you release orders that are marked for release to Oracle Cloud execution system, the release action offsets the date from the location’s time zone to the database server time zone (UTC).

For example, when you release a planned make order, supply chain planning converts the need-by date from the organization’s time zone to UTC.
2 Tables, Graphs, Analysis Sets, Infotiles, and Tile Sets

Creating Tables, Graphs, Tiles, and Tile Sets: Explained

To create tables, graphs, analysis sets, tiles, and tile sets, you use a set of predefined measures, dimensions, hierarchies, and members available in the Selector Tool. You can also create and manage groups using the Selector Tool.

To access the Selector Tool in the Demand Management work area:

1. In the Navigator, click the Demand Management work area link.
2. Click Actions, and then click Manage Table, Graphs, and Analysis Sets.
3. On the Search table toolbar, from the Actions menu, click Create, and then click one of the following:
   - Table
   - Graph
   - Analysis Set
   - Tile

The Selector Tool has the following four tabs:

- **Measures**: Use the Measures tab to select measures for a table, graph, or tile by moving measures from the Available Measures pane to the Selected Measures pane. A measure is usually a named time series of values that represents a particular intersection of time, product, organization, customer, and supplier dimensions.

- **Hierarchies**: Use the Hierarchies tab to select the dimensions, hierarchies, and levels to include in a table or graph. For each dimension, you can select the hierarchies and levels that you want to include in the graph or table. Selecting a check box in the Display column includes that dimension in the table or graph. Expand the dimension to view the available hierarchies. Expand the hierarchy to view the levels of the hierarchy. Selecting a level includes it in the table or graph. If you select multiple levels, the top level is displayed in the table or graph by default. You can expand each level in a table or graph until all checked levels are visible. For example, you can drill down to the levels you have defined in your calendar, such as Day, Week, or Period. If you select the Week and Day levels, data in a graph or table is shown starting at the Week level.

- **Members**: Use the Members tab to select dimension members by moving members from the Available pane to the Selected pane. If you do not select a dimension member in this tab, the graph or table displays the dimension starting at the top level checked on the Hierarchies tab.

- **Layout**: Use the Layout tab to format tables, graphs, and tiles. The following are the key layout options for tables, graphs, and tiles:
   - **Tables**: Use Table Layout Options to drag and drop dimensions to change the table layout and configure drill settings
   - **Graphs**: Use Graph Layout Options to select the graph type and the formatting options for the graph type you select
   - **Tiles**: Use Tile Layout Options to select the graph type, and add tables and graphs to the content area of the tile you are creating
Using Advanced Options in the Selector Tool

You can use the Advanced Filter criteria tools to filter data and select specific members that fulfill some criteria. Click the funnel icon in the Members tab to Access the Advanced Filter options. You can use the following filter criteria tools for predefined measures:

- **Levels**: Select by level (select the members in a level such as Customer Site for the Customer dimension, or Period for the Time dimension)
- **Family**: Select parent or child of a dimension member (select members based on a parent or child relationship, such as selecting the Days in a Week)
- **Attributes**: Select based on name (select members based on items whose name contains “Economy”)
- **Measure Criteria**: Select based on meeting measure criteria (select members that meet the criteria, such as Products for which the Gross Margin is greater than a particular value)
- **Time Range**: Select a range of dates (Select time periods based on a range, start date, or today’s date)

The advanced filter criteria tools are used in conjunction with action keywords to refine selections. The following four actions determine how to apply the criteria:

- **Replace with**: Replace the current selection, if any, with members meeting criteria
- **Add**: Add members meeting the criteria to the current selection
- **Keep**: Keep only the members in the current selection that meet the criteria
- **Remove**: Remove the members from the current selection that meet the criteria

You can apply filter criteria tools sequentially to refine the selection. For example, select all the items for a category, and then keep the top 10 items based on sales.

The **Show Results** button displays the filtered list of members based on the criteria. Removed members are shown below the filtered list. You have the option of accepting the results or resetting to the previous members.

The **Criteria Steps** area of the tab displays the criteria applied. You can click the X button in a row to remove a step. Click **Show Criteria Change** to view the result of removing a criteria.

Creating Analysis Sets

An Analysis Set is a named set of criteria that can contain selected measures, dimension members, or both measures and dimension members. You use the **Apply Analysis Set** and **Save as Analysis Set** actions to apply the selections you made previously, or save the selections made in the Selector Tool. Applying an existing Analysis Set to a table or graph is a quick way to select the measures and dimensions members that are frequently used.

You have the option of saving measures and dimension members. You can save the dimension members as a list, or as a script. For example, you can select the top 10 items based on sales for January. If saved as a list, the same 10 items would always be displayed in the table or graph regardless of the current month. However, as sales data changes over time, you would want the top items in the current month to be displayed. To accomplish this, save the dimension members in a script that would evaluate the criteria whenever the table or graph is displayed.

Using the Table Drilling

After creating a table, you can use drilling in the table to expand and collapse the levels within the hierarchy by which you can view different levels of aggregation. When viewing a table or graph, the dimensions and hierarchies selected in the Hierarchies tab are visible. The top selected level is visible. Use drilling to view lower levels.
To drill across hierarchies or dimensions, the levels must be adjacent. Drilling is automatically available for the levels within the predefined hierarchies. You can also configure drill pairs to drill across hierarchies or dimensions.

For example: To display a table showing Final Shipments History with the ability to drill from customer to item, the columns customer and item must be adjacent:

1. In the Layout tab, use the View menu to select Configure Drill Settings.
2. Configure Drill Settings to view the existing drill pairs.
3. Click the + icon to add a new drill pair.
4. In the Drill From column select Customer and in the Drill To column select Item.

With this configuration, you can view the Shipments History values by item for each customer in the table.

Using Table Linking

You can link a table or graph to another table or graph passing the context of one to another by selecting Manage Links from the Actions menu in the Manage Table, Graphs, and Analysis Sets dialog box.

There are two tabs:

- **To Table or Graph**: Use this tab to create a link to another table or graph.
- **From Table or Graph**: Use this tab to link to the open table or graph from another table or graph.

Use the + icon to select the table or graph to link to or link from and then configure the following linking parameters:

- **Enable dynamic linking**: This check box determines whether or not Dynamic Linking is enabled. If it is enabled, then the target table or graph has the ability to be refreshed whenever the selections on the source table change.
- **Pass highlighted selections and selected members**: If this button is selected, then whatever is highlighted in the current table along with the filters in the Selector can be passed as context to the Drill To Table or Graph.

After you define a link, use the Drill icon on the infotile toolbar to drill to the linked table or graph.

Related Topics

- Working with Page Layouts in Demand Management: Explained

Creating an Infotile: Procedure

An infotile is a tile shaped component used to present a graphical summary of the data. Each infotile has one or more related tables or graphs with predefined drill-to actions to display additional information about that key performance indicator (KPI).

To create an infotile:

1. In the Navigator, click a Supply Chain Planning work area.
2. Open a plan and then click Actions > Manage Tables, Graphs, and Analysis Sets.
3. In the Manage Tables, Graphs, and Analysis Sets dialog box, in the Search Results region, click Actions and then select Create > Tile.
4. In the Selector Tool - Create Tile dialog box, on the Measures tab, select the required measures and move them from the Available Measures pane to the Selected Measures pane.
5. On the Hierarchies tab, select the dimensions, hierarchies, and levels to include or exclude in the infotile.
6. On the Members tab, select the required dimension members and move them from the Available Members pane to the Selected Members pane. If you do not select a dimension member, the infotile displays the dimension starting at the top level selected in the Hierarchies tab.
7. On the Layout tab, do the following:
   - Select the graph type for the infotile.
   - Expand the **Content Area** panel, and then click the **Add Row** button. You can add up to four tables or graphs to display them in the content area for that infotile.
8. Click **Save and Close**.

### Creating a Tile Set: Procedure

You can create a tile set to group individual infotiles. Creating tile sets can be useful in cases where you want to track various metrics on a single page. You can add tile sets to a pane in a page layout.

**Tip:** Before you create a tile set, check whether you need to create the infotiles that you will be adding to the tile set.

To create a tile set:

1. In the **Navigator**, click a Supply Chain Planning work area.
2. Click **Actions** > **Manage Table, Graphs, and Analysis Sets**.
3. On the Search table toolbar, from the **Actions** menu, select **Create** > **Tile Set**.
4. In the Selector Tool - Create Tile Set dialog box, specify the following details:
   - Enter name and description for the tile set.
   - Select a group for the tile set.
5. From the Available Tiles pane, select the infotiles to include in the tile set and move them to the Selected Tiles pane.
6. Click **Save and Close**.

### Setting Measure Targets for Use in Infotiles: Explained

You can enter or update goals for a measure to track performance against the goals. Set targets by editing a measure and updating the measure goal. When the plan summary displays the measure, the goal or target for that measure is visible. You can define goals only for measures that are of data type currency, number, or percent.

For global goals, you can provide a low range or a high range. The ranges are displayed on the user interface when you view a measure in comparison with its goal. Global goals are measure level parameters and are not defined specifically for a data population.

To enter or update measure target goals, follow these steps:

1. Open the Manage Planning Measures page:
   a. In the Navigator, click a Supply Chain Planning work area link.
   b. On the Edit Plan page, click the Tasks panel tab.
   c. In the Tasks panel drawer, click the Manage Planning Measures link.
2. On the Manage Planning Measures page, select the measure and click the Edit icon.
3. On the Edit Measure page, navigate to the Advanced tab, Goals subtab.
4. In the Goals subtab, select whether low values or high values are better.
For example, high values are better for Gross Margin, but low values are better for Demand at Risk.

5. In the Global Goals section, provide a low range or a high range.

6. Click Save and Close.

Graph Layout Options: Explained

The graph layout option is available in the **Layout** tab when you create or edit a graph using the **Manage Tables, Graphs, and Analysis Sets** option. In the graph layout options, you can define the type of graph and configure layouts and the dimension of axes. The layout options vary according to the type of graph. For example, a bar graph has X and Y-axis layout options whereas a Pie chart does not have any X or Y axis. General Options is common for all layout options and includes generic information for a graph such as title, font, and position of the graph. You can also preview a graph from the Layout tab before you save the graph. In the preview mode, you can format measures, change the layout, and modify the drill settings.

The following types of graphs are available:

- X and Y axes graphs
  - Vertical bar
  - Horizontal bar
  - Line graph
- X and Y axes graphs with additional parameters
  - Area graph
  - Combination graph
  - Bubble graph
- Pie graph
- Sunburst graph and Treemap graph
- Funnel graph and Radar graph
- Gauge graph

For graphs with an X, Y, or dual Y axes, you can select up to three entities in total: measures are mandatory, and you can select one or two dimension hierarchies. A dual Y-axis graph requires the measures on the Y axis. You must select one measure for the Y2 axis in the Y2 -Axis panel. Axis title and tick label rotation options are available for all axes. Tick label options are also available for the X-axis. For example, skip a certain number of labels for legibility. The Formatting panel contains visual effect options for the graph, such as 2 dimension or 3 dimension, and bar or line style.

A Combination graph includes an area, bar, and line. The measures represented by each of these options are specified in the Formatting panel.

A Bubble graph requires selections for the bubble component of the graph in addition to the X and Y axes options. Select the hierarchy and the bubble sizing measure in the Bubble panel.

A Sunburst graph is comprised of rings. Select the number of rings to display. Each ring represents a level of the hierarchy. The rings are divided into sectors for each member of the level. The size and color of the sector is determined by the measures selected for those options.
A Treemap graph is comprised of rectangles. Select the depth of the rectangles for a hierarchy. The rectangles for a level of the hierarchy are nested within the parent level rectangle. The size and color of the rectangles are determined by the measures selected for those options.

Funnel and Radar graphs require only a hierarchy and measure selection.

Gauge graphs, which are used in infotiles, require measures with goals defined.

**Related Topics**
- Managing Tables, Graphs, Analysis Sets, Infotiles, and Tile Sets Using the Selector Tool: Explained

**Why can't I edit graph layout options?**

If you have created the graph or table, only then you can edit the layout options. Also, you cannot edit any layout options for predefined graphs or tables.

**Axis Scale Options: Explained**

Using Axis Scale Options, you can define the minimum and maximum scale values on the Y-axis, and the incremental values between them. You can define the axis scales using the following options: Minimum, Maximum, and Increment. Minimum indicates the starting point of the axis and Maximum indicates the ending point of the axis. Increment indicates the increase in values that are displayed between maximum and minimum data points. Axis Scale Options is available only for Bar, Line, Area, or Combination graphs and it is applicable for Y-axis and Y2-axis.

For each field, you can define either automatic or user-defined values. If you select Automatic, the planning process automatically adjusts the axis scale for Y-axis and Y2-axis data points. If you select Manual, you have to manually specify the scale for Y-axis and Y2-axis. For example, if you provide Minimum as 3, Maximum as 10, and Increment as 2, then for Y-axis or Y2-axis the graph displays 3 as the lowest value and 10 as the highest value. The graph also displays data points 5, 7, and 9 as incremental values.

**Managing Measure Data in Tables**

**Editing Measure Data in a Table: Overview**

When you are working in one of the Supply Chain Planning work areas, you may be editing measure data in a table. The following table provides a list of some features you can use when doing so, and where each feature is located:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure Summaries</td>
<td>View menu</td>
</tr>
<tr>
<td>Data Calculation Options</td>
<td>Table toolbar</td>
</tr>
<tr>
<td>Lock and Unlock Cells</td>
<td>If at least one summary is configured:</td>
</tr>
</tbody>
</table>
Managing Data Calculation Options When Editing Measure Data in a Table: Explained

When you are working in a Supply Chain Planning work area, you might be editing measure data in tables that include dependent measures. You can use the Data Calculation Options choices to determine when calculations are performed. You access **Data Calculation Options** from the table toolbar for the table you are editing.

The Data Calculation Options choices are:

- **Enable Automatic Calculations**
- **Calculate Now**

**Enable Automatic Calculations**
When you edit data with this option selected, each time you edit a value, calculations are performed for any applicable summaries or other measures that include an expression. The Enable Automatic Calculations choice is the default selection.

**Calculate Now**
To choose when calculations are performed, you must first deselect Enable Automatic Calculations. When you make edits with the Enable Automatic Calculations choice deselected, you must click the Calculate Now choice when you want calculations to be performed. Calculations will be performed for all edits made since the last time calculations were performed.

If you save a table after making edits, any needed calculations will be performed, but you must refresh the table to see the results.

Locking Cells When Editing Measure Data or Allocating Values in a Table: Explained

When you are working in a Supply Chain Planning work area, you might be editing measure data in a table. When you have locked cells, edits, including those that spread allocations to other cells, do not change locked cells.

**Note:** You must configure at least one summary to enable the **Lock** and **Unlock** actions.

Lock cells by performing one of the following:

- Click the Lock action in the Actions menu.
- Click the Lock icon on the table toolbar.
- Right-click in an editable cell.
How do I enable the Lock and Unlock actions for a table when editing measure data?

Configure at least one summary to enable the **Lock** and **Unlock** actions. Use the View menu for the table to configure summaries.

Can I unlock all cells at once when editing measure data in a table?

Yes, you can unlock all cells at once by using the **Unlock All** action from the Actions menu. This action is available in the Actions menu only if you have configured summaries.
Manage Exceptions

Exceptions and Exception Sets

Exceptions and Exception Sets in Supply Chain Planning: Explained

On the Configure Exceptions page, you can select an exception and edit the thresholds for reporting. You can configure only those exceptions that are relevant to your Supply Chain Planning work area.

On the Configure Exception Sets page, you can restrict the exceptions that are computed as part of the plan run. You can also control the organizations, item categories, time period, and so on for which to compute exceptions.

A defined exception set is associated with a plan. The plan evaluates the exceptions using the filters associated with the exception set. The exception set executed during the plan run is defined on the Plan Options page.

Editing Exceptions in Supply Chain Planning: Explained

To edit exception parameters, select an exception on the Configure Exceptions page. You can configure only those exceptions that are relevant to your Supply Chain Planning work area.

In the Edit Exception dialog box, there is an area for General Properties and Exception Detail. Depending on the Supply Chain Planning work area that you are in, you can see the following tabs in the Exception Detail section:

- Demand Management work area: Level, Threshold, and Notification
- Supply Planning work area: Level, Threshold, and Notification
- Planning Central work area: Level and Threshold
- Sales and Operations work area: Level, Threshold, and Notification

You can edit Level and Threshold only for those exceptions whose basis is Measure. For exceptions whose basis is Order, you can edit only the Threshold.

On the Level tab, the dimensions for the exception are derived from the base measure. You can edit the default values for hierarchy and level.

On the Threshold tab, the base measure used in the exception is compared to either a value or another measure. If the threshold is specified in terms of a value, the value is interpreted in terms of the data type of the base measure. To ensure that exceptions return meaningful values, set the threshold to an appropriately high or low value.

On the Notification tab, set up notification rules for exceptions. Configure exceptions to trigger notifications to specific users or roles. In the Details section specify the entity and condition for notifications. Notifications are sent automatically at the end of the plan run.
Configuring Exception Sets in Supply Chain Planning: Explained

Use the Configure Exception Sets page to create, modify, or copy an exception set. The set of exceptions and their scope that is calculated by the plan is configured on the Create or Edit Exception Set page. When creating an exception set, you must first specify which exceptions to include in the set.

The exception set also enables you to restrict the generation of exceptions to specific organizations, categories, suppliers, and customers. You can then point to the exception set on the Plan Options page for a plan.

Setting Filters on Planning Dimensions for Exception Reporting: Explained

After selecting available exceptions for an exception set to use in a plan, you can add filters on some of the key planning dimensions. The levels on which you can define filters are organizations, categories, suppliers, and customers.

On the Configure Exception Sets page in the Filters tab, select one or more organizations, suppliers, categories, and customers in each of the tables for which to generate exceptions. If you do not specify a filter for a level, you will generate exceptions for all records in that level. For example, if you do not specify an organization, exceptions will be generated for all planning organizations when a plan is run. If any of the organizations, categories, suppliers, or customers in the exception set are not available in the plan, they will be ignored.

In the Exception Cutoff Days field, specify the number of calendar days, starting from the plan start date, from which to generate the exceptions. If this field is blank, exceptions will be generated for the full planning horizon.

Exceptions in Plans

Plan Exceptions in Supply Chain Planning: Explained

Oracle provides several predefined exceptions that the planning processes compute after you run a plan. View these exceptions to identify problem areas in the plan that may need your attention. To view a list of the exceptions, open your plan and then open the Exceptions table.

Exceptions are a key element to evaluate and improve your plan. After you run a plan, view the exceptions to understand the quality of the plan and to get visibility of key problem areas. You can focus on key exceptions to understand their root causes. From the exceptions tables, you can drill down to other plan views for more details into the problem areas. After taking actions to resolve exceptions, run the plan again to evaluate whether the plan is now acceptable.

The exception types and their calculation logic are predefined. However, to ensure that only significant deviations are highlighted, you can edit the conditions under which the exceptions are generated. You control which exceptions are calculated for a plan by specifying an exception set on the Plan Options page. View the metrics associated with exceptions, such as by count or by quantity, in tables or graphs at different hierarchical levels.

Open the predefined Exceptions table to view the exceptions grouped within the following folders:

- Demand Planning Exceptions. You can access this folder from the Demand Management, Planning Central, and Sales and Operations Planning work areas only.
• Supply Planning Exceptions. You can access this folder from the Supply Planning and Planning Central work areas only.

• Sales and Operations Planning Exceptions. You can access this folder from the Sales and Operations Planning work area only.

• Views for Multiple Exceptions. You can access this folder from the Supply Planning and Planning Central work areas only.

You can see the number of exceptions generated within parentheses after the exception name. Click the exception name to view a table with details of the exception. From the exception table, you can:

• Search for exceptions for a specific item and organization within a specified date range.

• Save the search criteria for future searches.

• Export the table to a spreadsheet, rearrange columns, and perform other standard table actions on the table.

Predefined views within the Views for Multiple Exceptions folder enable you to view all exceptions for an item, resource, or supplier within the same table.

From tables that show exception data, you can navigate in context to other plan data. This navigation capability is useful when, for example, you are viewing exceptions for an item and you also want to see its supply or resource availability.

Configuring Exception Thresholds: Procedure

You can control the number of exceptions that your plan generates by changing the levels at which an exception is computed and its threshold value. A higher threshold value typically results in fewer exceptions.

To configure exception thresholds, do the following:

1. From one of the Supply Chain Planning work areas, select the Configure Exceptions task.
2. On the Configure Exceptions page, select an exception.
3. Click Actions and select Edit.

Demand planning and sales and operations planning exceptions are measure-based exceptions. A base measure forms the foundation for these exceptions.

In the Planning Central work area, you cannot change the base measure, but you can edit the level at which the exception is computed and its threshold value.

Most supply planning exception calculations are for a specific order and are not associated with a base measure. For these types of exceptions, select the fact associated with the exception and modify the condition that specifies when to generate the exception. Think of a fact as an attribute of the exception. Typical facts are quantity and value.

Creating Tables and Graphs for Exceptions: Procedures

Create a table or graph for plan exceptions based on their measures, such as number of exceptions generated, and the quantity associated with the exception.

Creating a Table for Exceptions

1. In one of the Supply Chain Planning work areas, open a plan.
2. Click the Actions button and select Manage Tables, Graphs, and Analysis Sets from the drop-down list.
Creating a Graph for Exceptions

1. In one of the Supply Chain Planning work areas, open a plan.
2. Click the **Actions** button and select **Manage Tables, Graphs, and Analysis Sets** from the drop-down list.
3. In the Manage Tables, Graphs, Analysis Sets dialog box, click **Actions**. Next, select **Create** and then select **Graph**.
4. On the Create Graph page, do the following:
   - Enter a name for your graph.
   - Select a group.
   - Enter a description.
   - Select the type of access (public or private).
5. On the Measures tab, do the following:
   - In the Available Measures section, expand the Overall Plan Health folder.
     The Overall Plan Health folder contains the measures associated with exceptions.
   - Select the exception facts that you want to view in the graph.
6. On the Hierarchies tab, include the Exception Type hierarchy.
7. On the Members tab, select the exception types to display in the graph.
8. On the Layout tab, do the following:
   - In the Graph Layout Options section, select a type of graph.
   - Configure your graph in the horizontal panels below the Graph Layout Options.
     The horizontal panels below the Graph Layout Options section vary, depending on the type of graph that you select. For example, if you select Pie Graph for your graph type, the horizontal panels include General Options, Pie Slice, and Formatting.
9. Click **Save and Close**.

**Related Topics**

- Managing Tables, Graphs, Analysis Sets, Infotiles, and Tile Sets Using the Selector Tool: Explained
User-Defined Exceptions

User-Defined Exceptions: Explained

Using user-defined exceptions, you can define exceptions based on specific conditions in the supply chain that you want to identify. A user-defined exception is defined as a combination of levels and conditions across several dimensions. For example, the user-defined exception can be defined at the product dimension as the item, customer dimension as customer site, and time dimension as week level. You use Configure Exception task to create a user-defined exception.

While all predefined exceptions are computed at the lowest level along the selected dimensions, user-defined exceptions can also be computed at a higher level. A user-defined exception refers to a condition being met or exceeded, or a threshold being met in the plan due to constraints in the supply chain.

You create an exception on a specific measure called Base Measure. You can create an exception based on the following thresholds:

- Value: Set the value and the specific operation, such as less than, equal, and larger than, against the base measure.
- Measure: Select the measure based on your business requirement and select the specific operation that meets the condition against the base measure.

User-defined exceptions let you focus on problem areas where user interaction provides value to the business. It can highlight potential problems with accuracy. For example, any gaps between last year’s booking or shipment or orders against the values for the current year. You can define exceptions based on your business requirements.

Creating Exceptions: Examples

Use this example to understand how to create exceptions, assign them to exception sets, associate and run a plan, and review the exceptions that are captured.

The following table lists the exception names and their details that you use in the user-defined exception scenario.

<table>
<thead>
<tr>
<th>Exception Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted booking History is less than 1000</td>
<td>Use this exception to capture all cases where the Adjusted Booking History measure is lower than 1000 on the intersection of specific Customer Site, Item and Day.</td>
</tr>
<tr>
<td>Adjusted Booking History lower than last year’s booking</td>
<td>Use this exception to view all cases where the Adjusted Booking History measure is set to be less than last year’s booking values. Last year’s booking data can be displayed using the Booking History 1 Year Ago measure.</td>
</tr>
</tbody>
</table>
The following figure illustrates the steps for creating exceptions.

Creating and Viewing User-Defined Exceptions

Create an exception called Adjusted Booking History is less than 1000:

1. In the Navigator, click a Supply Chain Planning work area.
2. Click the Tasks panel tab.
3. In the Tasks panel drawer, click the Configure Exceptions task.
4. Open the Actions menu and click Create.
5. On the Create Exception page, complete the following details:

   a. Enter the exception name as Adjusted Booking History is less than 1000.
   b. Select Demand Planning Exceptions as the exception group.
   c. Select Adjusted Booking History as the base measure.
   d. In the Levels tab, select the following details:
      i. Customer Site from Customer dimension
      ii. Item from Product dimension
iii. **Day** from Time dimension

6. In the Threshold tab, select the relevant operation for your exception’s condition. In this example, select **Less Than** as the operation and the threshold value to 1000.

6. Click **Save and Close**.

Create an exception called Adjusted Booking History lower than last year’s booking:

1. From one of the Supply Chain Planning work areas, select the Configure Exceptions task.
2. Open the **Actions** menu and click **Create**.
3. On the Create Exception page, complete the following details:
   
a. Enter the exception name as Adjusted Booking History lower than last year’s booking.
   
b. Select **Demand Planning Exceptions** as the exception group.
   
c. Select **Adjusted Booking History** as the base measure.
   
d. In the Levels tab, select the following details:

   i. **Customer Site** from Customer dimension
   
   ii. **Item** from Product dimension
   
   iii. **Day** from Time dimension

   e. In the Threshold tab, select **Less Than** as the operation and select **Booking History 1 Year Ago** as the measure threshold.

4. Click **Save and Close**.

Create an exception set called DM Booking History related exceptions:

1. From one of the Supply Chain Planning work areas, select the Configure Exception Set task.
2. Open the **Actions** menu and click **Create**.
3. On the Create Exception Set page, complete the following details:

   ◦ Enter the exception name and description as DM Booking History related exceptions.
   
   ◦ From the Available Exceptions, add the following two exceptions that you created to the Selected Exceptions area:
     
   • Adjust booking History is less than 1000
   
   • Adjusted Booking History lower than last year’s booking

4. Click **Save and Close**.

Next, open the Plan Options page. In the Scope tab, select the **DM Booking History related exceptions** as Exception Set. Click **Save and Run** to run the plan. Exceptions are calculated during the plan run.

View the results of the user-defined exceptions on the plan:

1. Open the predefined table called Exceptions.

   The table lists all exceptions detected on the plan.

2. Search for the exceptions you created.

3. From the Demand Planning Exceptions group, locate the Adjusted Booking History lower than last year’s booking exception.

4. Select the exception and expand the **Search** option in the right pane to view the captured exceptions.
4 Using Planning Analytics

Setting Up Planning Analytics: Explained

Configuring planning dimensions and hierarchies on the Configure Planning Analytics page is a key setup to use the analytics in Supply Chain Planning work areas. It has a unified dimensional hierarchy for various uses. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area, Supply Chain Planning offering. On the Supply Chain Planning offering page, click Setup and then click the Supply Chain Planning Configuration functional area.

To run plans successfully, you must complete the following Configure Planning Analytics tasks:

- Set Up Dimension Catalogs
- Set Up Measure Catalogs
- Set Up Levels and Attributes

You can use the default hierarchies for most of the dimensions.

If the default planning catalog named Default Catalog is not collected, then you must select at least one product hierarchy. If Default Catalog is collected, then the predefined Product hierarchy is selected as a product hierarchy by default. You can optionally add or change the product hierarchy. You must select at least one product hierarchy.

Configuring Planning Analytics: Procedures

To run plans successfully, you must set up dimensions and dimension catalogs, measure catalogs, and levels and attributes. You can open the Configure Planning Analytics task from one of the Supply Chain Planning work areas. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area.

To configure planning analytics:

1. In the Navigator, click one of the Supply Chain Planning work areas or click the Setup and Maintenance work area.
2. If you have clicked one of Supply Chain Planning work areas, then click the Tasks panel tab. In the Tasks panel drawer, click the Configure Planning Analytics link.
3. If you have clicked Setup and Maintenance, then in the Setup and Maintenance work area, select your offering. On the Setup: Supply Chain Planning page, click the Supply Chain Planning Configuration functional area, and then click the Configure Planning Analytics task.

Default Catalog is the name of the predefined dimension catalog. It contains predefined hierarchies. We recommend that you duplicate the Default Catalog if changes are required, instead of editing the default catalog.

4. On the Configure Planning Analytics page, Dimension Catalogs tab, do the following:
   a. Create a dimension catalog using the Add Row button, or duplicate the default dimension catalog using the Duplicate button.
   b. Specify what hierarchies to use in the dimension catalog by moving hierarchies from the Available pane to the Selected pane.
   c. Assign the dimension catalog to a plan that will use the set of hierarchies for analysis during the plan creation from Manage Plans.
5. Each work area has a default measure catalog. Create a new measure catalog to add or remove measures.
   a. Use the Add Row button to create a new catalog or use the Duplicate button to duplicate an existing catalog.
   b. Specify the measures for the catalog by moving the measures from the Available pane to the Selected pane.
   c. Assign the measure catalog to a plan that will use the set of measures during the plan creation from Manage Plans.

After you create and define a measure catalog, you can select the measure catalog for a plan from the Edit Plan Options page.

6. Click the Levels and Attributes tab and select the desired dimension and hierarchy.
   a. In the Dimension drop-down list, select a dimension.
   b. Optionally, in the Hierarchy drop-down list, select a hierarchy.
   c. Click the Search icon button.
   d. To change how the level name appears in pivot tables and graphs, select the row and enter the level name in the Display Override field.

   ✨ Note: You cannot edit the Display Override field for the lowest level of the hierarchy.

   e. To add an attribute for the lowest level of the hierarchy, click the Edit Page button in the Attributes column.
      i. In the Manage Attribute List dialog box, click the Add Row button.
      ii. In the Attribute drop-down list, select an attribute.
      iii. In the Attribute Label text box, enter a label name and click OK.

7. On the Configure Analytics page, click the Save and Close button.

Dimensions and Dimension Catalogs

Dimensions and Dimension Catalogs: Explained

Oracle Fusion Supply Chain Planning has hierarchy levels by which you can view, compare, and analyze demands and supplies of your products over various dimensions, such as geography and organizations. Supply Chain Planning uses a single set of dimensions and hierarchies to drive aggregation context for demand planning, supply planning, embedded analytics, and management analytics.

Supply Chain Planning provides predefined planning dimensions. Each of those dimensions has a predefined hierarchy. When you implement the Supply Chain Planning offering, you must decide which dimensions and hierarchies to use for demand and supply analysis.

Each dimension catalog has a collection of hierarchies in different dimensions that is enabled for use in the plan options. By default, all predefined hierarchies are available in Planning Analytics. You can disable certain dimensions that are not relevant for your plans. For example:

- If you are only using demand plans, then supplier, resource, and order type dimensions may not be relevant
- If you are using sales and operations plans, then the order type dimension is not relevant
The following hierarchies are predefined in Supply Chain Planning:

- Customer
- Demand Class
- Exception Type
- Order Type
- Organization
- Plan
- Product
- Resource
- Supplier
- Source
- Time

On the Configure Planning Analytics page, Dimension Catalogs tab in one of the Supply Chain Planning work areas, you can specify which hierarchy to use in a particular dimension catalog. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area, Setup: Supply Chain Planning page, Supply Chain Planning Configuration functional area.

In the Dimension Catalog tab, several hierarchies are available in various dimensions. For example, you can select an organization type hierarchy, a product type hierarchy, or a customer hierarchy to use in plans for analysis. After you define a dimension catalog, you can assign it to a plan that will use the set of hierarchies for analysis.

You can select one of your dimension catalogs to be used as the default dimension catalog in plans. If you do not select a default catalog, the predefined catalog named Default Catalog is used.

**Related Topics**
- Disabling and Enabling Dimensions for Supply Plan Measures in Supply Chain Planning: Explained

**Setting Up Dimension Catalogs: Points to Consider**

Supply Chain Planning provides predefined planning dimensions and each of those dimensions have predefined hierarchies. The predefined hierarchies are included in the default dimension catalog and are available in all plans.

**Hierarchy Selections for the Product Dimension**

A predefined Product hierarchy is included in the default dimension. The default Product hierarchy has three fixed levels: Item, Category 1, and Category 2. Other Product hierarchies (other item catalogs in Oracle Fusion Product Model that are collected into Supply Chain Planning work areas) can be optionally enabled as user-defined product hierarchies.

For Oracle Fusion Sales and Operations Planning, the Lifecycle Phase attribute is also included in the default dimension.

By default, Oracle Fusion Product Model's planning functional area catalog is collected into the Product hierarchy. For the collection to run successfully, you must create the planning functional area catalog in Product Model with the following attributes:

- Controlled at = Master-Level (not Org-Level)
- Allow hierarchy of categories = No
- Default category must be selected
- Allow multiple item category assignments = Not selected
- Catalog Content = Items at Leaf Level

If this catalog is not set up with these attributes, the planning functional area catalog is not collected and the Product hierarchy will not be populated. This will result in the forecasting engine not being able to use the product aggregation and some of the predefined tables and graphs will not work correctly.

**Hierarchy Selections for the Organization Dimension**

Enterprise is the default organization hierarchy and has three fixed levels: Organization, Business Unit, and Legal Entity. This default organization is defined in Oracle Fusion HCM and you can only modify it there. Optionally, you can enable other Organization hierarchies (based on regions, one per country).

**Hierarchy Selections for the Customer Dimension**

The default Customer hierarchy has three fixed levels: Customer site, Customer, and Customer Class. This default customer hierarchy is defined in the trading community model and you can only modify it there.

**Hierarchy Selections for the Resource Dimension**

The default Resource hierarchy has four fixed levels: Resource, Work Center, Work Area, and Organization. This default resource hierarchy is defined in Oracle Fusion Manufacturing and you cannot modify it.

**Hierarchy Selections for the Supplier dimension**

The default Supplier hierarchy has two fixed levels: Supplier Site and Supplier.

**Hierarchy Selections for the Exception Type, Order Type, and Source Dimensions**

Predefined Exception Type, Order Type, and Source dimensions are included in the Default dimension catalog. Each has only a single hierarchy with a single level.

**Hierarchy Selections for the Time Dimension**

In the Time dimension, Gregorian calendar is the only predefined hierarchy. All other hierarchies can be optionally included as user-defined hierarchies. These include workday calendars of inventory organizations collected from Oracle Fusion Supply Chain Management and fiscal calendars from Oracle Fusion Financials.

**Related Topics**

- Disabling and Enabling Dimensions for Supply Plan Measures in Supply Chain Planning: Explained

**What's a dimension in Supply Chain Planning?**

A dimension is a structure that organizes data. It categorizes data to enable you to answer business questions. Commonly used dimensions are customers, products, and time.

**How can I use dimensions in Supply Chain Planning?**

Supply Chain Planning applications come with predefined hierarchies in the Product dimension. These predefined hierarchies are part of the Dimension catalog structure in Oracle Fusion Product Model. Integrations with Oracle E-Business Suite and third-party systems where the product dimensions can still be maintained and uploaded for use by the Oracle Supply Chain Planning Cloud applications is supported.
What's a dimension catalog in Supply Chain Planning?
In Supply Chain Planning, a dimension catalog is a selected list of dimensions enabled for use in plans. In Supply Chain Planning, a dimension catalog is a selected list of hierarchies in different dimensions that is enabled for use in plans. The Default dimension catalog appears by default, but can be changed to another dimension catalog that has been defined.

Can I modify the default dimension catalog?
Yes, you can modify the Supply Chain Planning default dimension catalog. However, if you want to make any changes, Oracle recommends that you create a duplicate of the default dimension catalog.

Measure Catalogs

Measure Catalogs: Explained
The measure catalog is similar to the dimension catalog. Each measure catalog has a collection of measures that you can enable for use in plans in one of the Supply Chain Planning work areas. While Oracle provides predefined measures, you can also create measures in some work areas and add them to a measure catalog.

On the Configure Planning Analytics page, Measure Catalogs tab, you can create a measure catalog and add or remove measures from a measure catalog.

The predefined measure catalog is the default. When you create a new plan, the measure catalog that is used is based on the catalog check box located on the Measure Catalogs tab. For example, the catalog check box in the:

- Planning Central work area is **Planning Central Catalog**
- Sales and Operations Planning work area is **Sales and Operations Planning Catalog**
- Demand Management work area is **Demand Management Catalog**
- Supply Planning work area is **Supply Planning Catalog**

If you change the default catalog later, the plan continues to use the same measure catalog that it was created with.

Can I modify the default measure catalog?
No. Although you cannot modify the default measure catalog, you can create a measure catalog, modify the list of measures, and assign it to plans on the Plan Options page.

Levels and Attributes
Levels and Attributes: Explained

On the Levels and Attributes tab, you can enable certain item and organization attributes (standard fields or flexfields) to be available in Planning Analytics as filters. For example, you can enable PLANNER_CODE to use in an analysis to group metrics and measures by that particular attribute.

You can create a display name to use in the various pivot tables and graph configurations. For example, if the predefined level name is Product Category 2, you can enter a display name of Laptops.
5 Run Collections

Collecting Planning Data: Explained

To run plans from one of the Supply Chain Planning work areas, you must collect data into a planning data repository. Order promising and order management processes also use the planning data repository to promise and manage orders.

To collect data into the planning data repository, you can perform these tasks:

- Collect Planning Data: Use this task when you collect data from the Oracle Fusion source system
- Load Planning Data from Files: Use this task when you collect data from a completely external source system.

Depending on your security privileges, you can perform these tasks from one of the Supply Chain Planning work areas or you can navigate to the Setup and Maintenance work area, Supply Chain Planning offering, Supply Chain Planning Configuration functional area.

The following figure illustrates the collections processes that you can use to populate the planning data repository.

Collect Planning Data

There are two steps involved in the data collection process. The Collect Planning Data process first pulls data from the Oracle Fusion source system into staging tables. The process then loads data from the staging tables into the planning data repository.
On the Collect Planning Data page, use the following tabs to select what data you want to collect:

- Reference Data
- Demand Planning Data
- Supply Planning Data

Most of the reference data are global entities. Global entities are common for all source systems. For example, Units of Measure (UOM) is common for all source systems. The supply planning and demand planning data are transactional data. Most of the transactional data are local entities. Local entities are specific to each source system. For example, On-hand Quantity is specific for each source system.

You can also select collection filters to further refine what data you want to collect. You can save your selections to collection templates.

Load Planning Data from Files

Use this option to populate the planning data repository using CSV files:

To load the planning data from files, follow these steps:

1. Create the CSV files. To create the CSV files, you can use a predefined set of Microsoft Excel files as import templates.
2. Import the CSV files. From the navigator, click File Import and Export, and create a new import. Specify scm/planningDataLoader/Import for the account.
3. Submit the Load Planning Data from Files process. When you submit the process, the process first pushes the data from the CSV files into the staging tables. The process then loads the data from the staging tables into the planning data repository.

Collecting Global Entities: Explained

Within data collections, Oracle Fusion Supply Chain Planning refers certain business entities as global entities. Global entities are specific for each instance and are common for all source systems. They are common without regard to whether they are collected from the Oracle Fusion source system or collected from an external source system using the file-based data import (FBDI) method.

When collecting data for a global entity, the planning data repository stores only one record for each instance of the global entity. The data collections process removes the source system reference from the global entity and stores the data in the data repository. If the data collections process collects the same instance of a global entity from more than one source system, the data repository stores the value from the last collection.

For example, the following scenario describes the collection method of the global entity called units of measure (UOM) from three source systems, namely source system A, B, and C respectively.

- Source system A has an instance of UOM. During the collection of UOMs from source system A, the kilogram UOM is collected. This is the first time the kilogram UOM is collected. The data collections process creates a kilogram record in the data repository.
- Source system B does not have any instance of UOM. During the collection of UOMs from source system B, the data collections process does not collect the kilogram value. Since there was no record for the kilogram UOM in source system B, the data collections process does not change the kilogram record in the data repository. The record of the kilogram value from source system A is still valid.
• Source system C has an instance of UOM. During the collection of UOMs from source system C, the kilogram UOM is again collected. The data collections process registers the kilogram record in the data repository to match the values from source system C.

**Note:** When you use the FBDI collection method, the global entity files require a source system. The collections framework validates that the source system matches each record’s source system. A source system identifier marks each data record.

In Supply Chain Planning, the following entities are classified as global entities:

• Order Orchestration Reference Objects
• Units of Measure and UOM Conversions
• Demand Classes
• Currency and Currency Conversion Class
• Shipping Methods (Carrier, Mode of Transport, Service Level)
• Customer and Customer Site
• Suppliers and Supplier Sites
• Regions and Zones
• Approved Supplier List
• Supplier Capacity
• Planners

### Targeted, Net Change, and Automatic Selection Collection Types: Explained

When you collect planning data, one of the parameters you specify for the Collect Planning Data task is the Collection Type parameter. You can select this task from any of your Supply Chain Planning work areas. For the Collection Type parameter, you can select one of the following values:

- **Targeted:** Choose the Targeted collection type when you want to collect a significant volume of source system data. Typically, you use the Targeted collection type in scenarios such as bulk upload of transaction data, instance upgrade, and change in collection filters.
- **Net change:** Choose the Net change collection type when you want to collect changed data and new records since the last successful collection cycle.
- **Automatic selection:** Choose the Automatic collection type when you want the planning process to decide and automatically select an appropriate collection type for each of the entities.

### Targeted

You use the Targeted collection type when you want to perform a complete refresh of the data in the data repository. In this mode, the planning process deletes the existing data for the selected entities from the data repository. Next, if subsequently collected from the source, the data for the selected entities replaces the deleted data.

**Note:** For the following data collection entities, you can use only the Targeted collection type: Item Costs, Resource Availability, Fiscal Calendars, and all Shipment and Booking History data.
Net change

When you use the Net Change collection type, you collect data incrementally. The Net Change collection type collects only changed or new data. Collecting data using the Net Change collection type is usually faster than using the Targeted collection type. You typically use the Net Change collection type when you have previously performed a Targeted collection, and now you want to keep your planning data current with your execution system data. You cannot select the demand planning data when the collection type is Net Change.

Automatic selection

You use the Automatic collection type when you are not sure which collection type to select and you want the planning process to decide the collection type for each entity. The planning process evaluates each entity on multiple factors, such as the last collected date for an entity, and decides whether to perform a Targeted or a Net Change collection for the entity. You can manually select the entities that you want to collect or you can use one of the predefined templates to select your entities. If you select one of the predefined templates, you cannot make any changes in the Reference Data, Demand Planning Data, and Supply Planning Data tabs.

Data Collections, Order Orchestration, and Order Promising: How They Fit Together

You perform data collections to populate the planning data repository. In addition to being used by Supply Chain Planning processes, the collected data is used by Oracle Fusion Order Management order orchestration processes and by Oracle Fusion Global Order Promising processes.

Data Collections

You must perform data collections to populate the planning data repository, also called the order orchestration and planning data repository, with data from the Oracle Fusion source system or from a completely external source system. When you load data from an external source system, use the XLSM files to organize your data in the required format and then convert the data into CSV files. You can then upload the CSV files to the planning data repository.

Order Orchestration

Order orchestration processes use some reference data directly from the planning data repository. You must perform data collections for the order orchestration reference entities even if you are not using the Supply Chain Planning work areas.

Note: Before collecting data from your Oracle Fusion source system, you must define at least one organization for the source system. After you have set up at least one organization, you must update the organization list on the Manage Planning Source Systems page and then enable at least one of the organizations for collections. If you have not enabled any organization, then the collections process ends with an error.

Order Promising

The Global Order Promising processes use an in-memory copy of the data from the planning data repository. When order orchestration processes send a scheduling request or a check availability request to Oracle Fusion Global Order Promising,
the order promising processes use the data stored in main memory to determine the response to send back to order orchestration. You must refresh the Global Order Promising data store after every collections so that the main memory always reflect the current.

Related Topics
- Refreshing the Global Order Promising Engine: Explained

Enable Cross-References of Entities by Data Collections: Explained

Cross-references allows you to locate the correct source value for each cross-referenced entity. When you enable entities for cross-referencing, data collection pays attention to the cross-references that you have set up for certain values.

To enable cross-referencing of entities, click the Manage Planning Data Collection Processes task from your supply chain planning work area. Select the source system from the list, and then enable the available entities that you want to cross-reference during data collections.

You can view the cross-referenced data for each entity on the Cross-Reference Relationships for Collected Data page in the Plan Inputs work area.

Collecting Data from the Oracle Fusion Source System

Managing Planning Source Systems for Data Collections: Explained

To populate the planning data repository, also known as the order orchestration and planning data repository, you collect data from the Oracle Fusion source system. On the Manage Planning Source Systems page in one of the Supply Chain Planning work areas, enable organizations for collections. Depending on your security privilege, you can also enable organizations from the Setup and Maintenance work area, Supply Chain Planning offering. From the Setup: Supply Chain Planning page, click the Supply Chain Planning Configuration functional area and then click the Manage Planning Source Systems task.

The Oracle Fusion Source System

The Oracle Fusion source system is included as a source system for data collection. Supply chain planning, order orchestration, and order promising processes use data that are stored in the planning data repository. You ensure the Collections Allowed check box is enabled and manage which organizations you enable for collections. To open the Manage Trading Community Source Systems page, navigate to the Setup and Maintenance work area, and select the Supply Chain Planning offering. On the Setup: Supply Chain Planning page, click the Supply Chain Planning Configuration functional area. On the Supply Chain Planning Configuration page, you may have to select All Tasks from the Show drop-down list to view the Manage Trading Community Source System task.

External Source Systems

You can also allow collections for external source systems if you will be loading planning data from files for Oracle Fusion Global Order Promising. You must first define the external source system on the Manage Trading Community Source Systems.
There are two types of external source systems: Others and External.

**Version External**

The version External source system indicates that the source system is not connected to any other Oracle Fusion applications. This source system is not integrated with Oracle Fusion Product Data Model, Oracle Fusion Trading Community Model, and Oracle Fusion Order Management Cloud. The external source system is also referred as a completely external source system. You cannot enable any other source system settings that are related to other Oracle Fusion applications. You can select the Collections allowed check box now or later depending on when you want to start collecting data. This enables the source system for data collections using the file-based import process.

**Version Others**

The version Others source system indicates that the source system is connected to other Oracle Fusion applications. This source system is integrated for Oracle Fusion Product Data Model, Oracle Fusion Trading Community Model, and Oracle Fusion Order Management Cloud. The following conditions are applicable when the external source is Others.

- External system data for Items, Item Structures, and Catalogs is uploaded to Oracle Product Data Model Cloud
- External system data for Customers, Customer Sites, Regions and Zones is uploaded to Oracle Trading Community Model Cloud
- External system data for Sales Orders is uploaded to Oracle Order Management Cloud

For more information on types of data that can be collected for each source system, see the Using the Import Templates to Create the CSV Files: Explained topic.

**Organizations Enabled for Data Collections**

The process for enabling organizations varies depending on the version of the source system.

To enable organizations for data collections when the source system version is **Oracle Fusion**, perform the following steps:

1. Click the Manage Organization List button for your Oracle Fusion source system.
2. Click the Refresh Organization List button to update the organizations list
3. Select the Enable for Collections check box for the organizations from which you want to collect data.

**Tip:** When performing collections during your initial setup, collect order orchestration reference objects from the predefined Oracle Fusion source system, and consider collecting organizations. After enabling organizations for collection, collect organizations first. You can confirm the collection results on the Supply Network Model page.

To enable organizations for data collections when the source system version is **External** (completely external source system), upload organizations using the file-based import process. The organizations are automatically enabled for collections.

To enable organizations for data collections when the source system version is **Others**, perform the following steps:

1. Define an organization as an item-organization in the product data model.
2. Upload the organization using the file-based import process and associate the organization with **Others** source system.

**Related Topics**

- Enabling Organizations for Data Collections: Points to Consider
Collecting Reference, Supply, and Demand Data from Oracle Fusion Source System: Explained

When you collect data, you collect data from three categories: reference data, demand data, and supply data. On the Collect Planning Data page there is a tab for each of these categories.

The collected data are stored in the planning data repository.

The following figure illustrates the three categories of data that you collect from the Oracle Fusion source system to the planning data repository.

![Diagram](image)

**Explanation of Callouts**

1. Reference data is primarily sourced from Oracle Fusion SCM Cloud
2. Demand data comes from Oracle Order Management Cloud Service and Oracle Materials Management Cloud Service
3. Supply data is sourced from Oracle Inventory Management Cloud Service, Oracle Manufacturing Cloud Service, and Oracle Purchasing Cloud Service

**Reference Data**

The collection process begins with reference data, which is primarily sourced from Oracle Fusion SCM Cloud. You collect the data collection entities, such as basic item, resource, organization, customers and suppliers, and calendar data.

*Note:* Oracle Fusion Sales and Operations Planning uses the Bill of Resources entity to link the make items with their associated components and resource requirements. For more information on collecting Bill of Resources from an external source system, see the Loading Planning Data from Files section.
You also use Oracle Supply Chain Planning Cloud to collect the following items:

- Item structures: To explode item-level demand into component demands and supplies.
- Work Definitions: To assign the component and resource requirements for make items.
- Units of measure: To align plan data and to convert plans from one set of units to another.
- Costs: To review plans in financial terms and evaluate the financial impact of planning decisions.

**Demand Data**

You collect demand data from two potential sources:

- Sales orders that flow from Oracle Order Management Cloud Service: You can use this as the basis of the demand forecast, while current orders can consume the demand in near-term forecast time buckets.
- Shipment history from Oracle Materials Management Cloud Service: You can use this to generate a shipments forecast.

**Supply Data**

You collect supply data from three sources:

- Oracle Inventory Management Cloud Service: This provides data related to on hand inventory, reservations, material transfers, in-transit supplies, and receipts.
- Oracle Manufacturing Cloud Service: This provides work in process status and any manufacturing work orders.
- Oracle Purchasing Cloud Service: This provides purchase requisitions and purchase orders.

**Using Collection Filters and Collection Templates: Explained**

You use collection filters and collection templates when you need to collect some common set of entities repeatedly. The collection filters and collection templates are located on the Collect Planning Data page. To open the Collect Planning Data page, click the Collect Planning Data task from one of the Supply Chain Planning work areas.

Depending on your security privilege, you can also open the Collect Planning Data page from the Setup and Maintenance work area.

1. On the Setup and Maintenance work area, click the Supply Chain Planning offering, and then click the Supply Chain Planning Configuration functional area.
2. From the Supply Chain Planning Configuration functional area, click the Collect Planning Data task.

**Collection Filters**

Use collection filters to improve the performance and efficiency of the collections process, and to avoid accumulation of irrelevant data in the planning data repository. You can use several filter criteria while performing collections, such as by employing catalogs, order types, and price lists. You can also use date-based filters for collecting shipment and booking history information.

**Enabling Collection Filters**

To enable collection filters, you must first run the schedule process called Load Filter Names for Planning Data Collection from the Scheduled Processes work area. When you run the scheduled process, the filters get enabled in the Collect Planning Data page. Then, you can apply the filters from the next collection.
Collection Templates

Use collection templates when you want to collect a set of data repeatedly over a period. You can select either one of the predefined templates that serve your specific need, or you can create your own template and save it for future use.

When you select a predefined template from the list, the Collection Type field is defaulted to **Automatic selection** and you cannot edit the field. Also, when you select a predefined template, the Select Collection Filters field is disabled.

You can create a collection template on the Collect Planning Data page by selecting the data collection entities and saving the template for future use. For example, if you frequently collect certain supply planning transactional entities, such as On Hand, Purchase Orders, and Purchase Requisitions, then save these entities as a collection template. It reduces the overhead of selecting the same entities for subsequent collection cycles.

If the template file contains any error during the upload process, rectify the issue found in the log file and upload the template file again.

Collecting from the Oracle Fusion Source Using the Targeted Collection Type: Procedure

To perform a complete refresh of the data repository used by the Supply Chain Planning products, run a targeted collection. You can run the targeted collection immediately or you can schedule the process to run later. Demand planning data can only be collected by using the Targeted collection type.

> **Note:** Before collecting demand planning data, you must successfully run the **Load Filter Names for Planning Data Collection** scheduled process.

Perform the following steps to collect reference data, demand planning data, and supply planning data using the Targeted collection type.

1. Access the Collect Planning Data page from a Supply Chain Planning work area or the Setup and Maintenance work area.
   - If you are in the Setup and Maintenance work area:
     i. Select your offering.
     ii. On the Setup: Supply Chain Planning page, click the Supply Chain Planning Configuration functional area.
     iii. Click the **Collect Planning Data** task.
   - If you are in one of the Supply Chain Planning work areas:
     i. Click the Tasks panel tab.
     ii. In the Tasks panel drawer, click the **Collect Planning Data link**.

2. On the Collect Planning Data page, complete the following steps.
   - On the Parameters tab:
     i. Select your source system.
     ii. For the collection type, select Targeted.
     Demand planning data can only be collected by using the Targeted collection type.
     iii. Click **Select Collection Filters** to select the collection filters.
On the Reference Data subtab, move the required reference entities to the Selected Entities area.

On the Demand Planning Data subtab, set options to collect the historical demand data in the planning data repository. The planning process uses the historical demand data for statistical forecasting.

- **Collection Time Frame Options**: You can specify a fixed or rolling date range for which to collect data.

  The **Fixed Date Range** option enables you to collect history data within a fixed date range that you specify.

  The **Rolling Date Range** option enables you to collect the history data for the number of days that you specify. For example, if you forecast weekly, specify 7 in the **Number of Days to Collect** field to collect the demand history data once per week. The data collections collect the demand history data for the latest week.

  Select **Roll off time periods automatically** to truncate the history data by the number of days that you specify in the **Number of days to keep** field each time you run collections for the demand history data. For example, if you prefer to forecast each week based on the history data of 52 weeks, select the **Roll off time periods automatically** check box and specify **Number of days to keep** as 364 days. This setting ensures that as you collect data every week, you keep the most recent history of 52 weeks and automatically purge history data older than 52 weeks.

- **History Measures and Attributes**: Select your shipments history and bookings history measures.

- **History Data Options**: To collect only specific order types, select from the **Order Types to Include** list of values. By default, all order types are included.

  Select the **Collect amount data for history** check box to collect amount data.

  If you select the **Collect historical transfer orders** check box, transfer orders are collected and are included in the shipments and bookings measures.

- **Additional Options**: Select additional options for collections.

  - **Collect Price Lists**: Collect the price lists specified in the collections filter for price lists, or collect all price lists if no filter is specified.

  - **Collect Configure to Order Data**: If you selected history measures and attributes, then select the relevant check boxes to collect shipment history options and booking history options.

  **Sales Organization Hierarchy**: Select **Enable sales organization hierarchy collection** to collect one or more sales hierarchies.

On the Supply Planning Data subtab:

- Move the required supply entities to the Selected Entities area.
- If you collect resource availability, provide the resource availability start date and end date.
- You can collect the existing data for the resource availability.
- You can also regenerate the resource availability data and then collect the data. If you select the **Regenerate data, and then collect** option, the collections process runs the **Update Resource Availability Job** scheduled process first and then collects the resource availability data.

3. (Optional) Click the Schedule tab and set collections to run as soon as possible or schedule to run at a different time.

4. Click **Submit** to start the collections process.

5. Monitor the collection status using the Scheduled Processes page.

6. Review the collected data in the Plan Inputs work area.
Collecting from the Oracle Fusion Source Using the Net Change Type: Procedure

You can collect data from the Oracle Fusion source system by running the net change collection or by scheduling to run the process later. Before running a Net Change collection, you must run a Targeted collection for the selected entities. After the first Targeted collection, you can run Net Change collections.

Perform the following procedure to collect reference data and supply planning data using the net change collection type:

1. In the Navigator, click one of the Supply Chain Planning work areas or Setup and Maintenance work area.
2. If you have clicked **Setup and Maintenance**, then in the Setup and Maintenance work area, select your offering. On the Setup: Supply Chain Planning page, click the Supply Chain Planning Configuration functional area, and then click the **Collect Planning Data** task.
3. If you have clicked one of Supply Chain Planning work areas, then click the Tasks panel tab. In the Tasks panel drawer, click the **Collect Planning Data** task.
4. Complete the following parameters for the Collect Planning Data process:
   a. Select your source system.
   b. Select the collection type as Net change.
   c. In the **Reference Data** tab, move the required reference entities to the Selected Entities area.
   d. In the **Supplies Planning Data** tab, move the required supply entities to the Selected Entities area.
5. (Optional) Click the **Schedule** tab and set collections to run as soon as possible or schedule to run at a different time.
6. Click **Submit** to initiate the collections process.
7. Monitor the collection status using the Scheduled Processes page.
8. Review the collected data in the Plan Inputs work area.

Loading Planning Data from Files

Loading Planning Data from Files: Overview

You upload data using CSV files for specific business objects using the targeted or net change method.

**Note:** To create the CSV files, you can use a set of Microsoft Excel template files that are provided for this purpose. You can download the templates from the File-Based Data Import for SCM Cloud guide in the Oracle Help Center.

You use the targeted mode when you want to refresh data for selected entities in the planning data repository. You use the net change mode to collect data incrementally. The net change collections mode collects only the changed or new data.
Data collection using the net change mode is fast compared to the targeted mode. The net change mode is used to retain planning data to current with that of the executing system.

The following figure illustrates the process of collecting data from files.

To load planning data from files, you perform the following steps:

1. Create CSV files using Microsoft Excel template
2. Run the process to load planning data from files
3. Verify the load planning data process
4. Review the loaded data

Creating CSV Files Used to Load Planning Data: Procedure

To perform the Load Planning Data from Files task in one of the Supply Chain Planning work areas or Setup and Maintenance work area, you must prepare the data you want to load. You must create the necessary CSV files used to create files for import. This procedure explains how to create CSV files to prepare planning data for loading.

1. Locate the applicable file import templates (XLSM files) in the following guide: File Based Data Import for Oracle Supply Chain Management Cloud. Extract the templates to a local space.
   For additional information about creating and importing CSV files, see the following section in the Oracle SCM Cloud Implementing Common Features for Oracle SCM Cloud guide: External Integration chapter, External Data Integration Services for Oracle Cloud section.
2. Open the template file for the entity you are preparing and complete the file import template worksheet.
You must enable the macros in the template file before generating the CSV file.

⚠️ **Caution:** For the cells that contain dates, ensure that the data is set to the correct format in the data type. For example, date must be set to YYYY/MM/DD.

3. After you finish preparing the data in the worksheet, generate the CSV file. The Generate CSV File button is located in the Instructions and CSV Generation worksheet of the workbook.

4. When you save the generated CSV file, you must use the suggested name of the entity. You can add underscore and add additional characters to the file name. For example, you can name the CSV file as ShipmentHistory_abc.csv and you can name the file as LoadingCSV.zip.

5. Compress the CSV file into a zipped file format using a compression utility. You can provide any name to the zipped file.

📝 **Note:** You can include multiple CSV files in a single compressed file for a source system. The load process uploads them in a sequential order. Select the CSV files and compress them directly. Do not compress the parent folder that contains the files.

This completes the preparation of a file that you will upload to collect planning data.

**Data Collection Sequence: How Collection Entities are Related**

This topic explores the sequence that you should follow for data collection. Data collection involves collecting entities in a predefined sequence. The collected entities form the basis for supply planning calculations. To have accurate data, you must ensure to collect the entities in a proper sequence. You cannot collect some entities without collecting their precursor entities. The data collection sequence is very crucial when you collect data from an external source system using CSV files.

If you run targeted collections for all entities, you can ignore the sequence for collections because targeted collections automate the collection sequence for all entities within a single collections request. If you collect many entities in a single request, collections will process them according to the sequences shown in this topic. If you collect only a few entities, then you must be aware of the collections sequence information. For example, you should not collect work orders before you collect items or resources.

To make the workflow simple, the collection sequence is divided into two parts - Part A and Part B. The collection entities in Part B are dependent on the collection entities in Part A. You must collect the entities in Part A before you collect the entities in Part B. Also, the collection entities are grouped together for easier presentation. The data groups in Part A are:

- Collections Sequence Part A for Item Data
- Collections Sequence Part A for Region, Location, and Customer Data
- Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data

The data groups in Part B are:

- Collections Sequence Part B for Sales Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

Every collection sequence in Part A starts with defining a source system where the collected data will reside. If you are collecting data to the same source system, you define the source system only once. Then, use the same source system to collect all the entities.
The following figure provides an overview of the data collection sequence. The overview shows how Part A and Part B fit together to form a complete data collection flow.

**Data Collection Sequence Overview**

- **Part A**
  - Collection Sequence Part A for Currency, Calendar, Demand Class, and UOM Data
  - Collection Sequence Part A for Region, Location, and Customer Data
  - Collection Sequence Part A for Item Data

- **Part B**
  - Collection Sequence Part B for Sales Order and Assignment Sets
  - Collection Sequence Part B for Work Orders, Work Definition, Item Structure

- Continue to Collection Sequence Part B

**Collections Sequence Part A for Item Data**

The following image shows the collections sequence to follow while collecting Item data from external source systems. This image represents only half of the entities for collecting Item data.

- **Note**: The Organization entity is marked with an asterisk because you can collect other entities such as Planner, Item Cost, Subinventory, Carrier, Calendar Assignment, Supplier, and Supplier Site after collecting Organization. For more information on the collection sequence for these entities, see the Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data figure. Refer to the entities that are collected after Organization. Also, ensure that you collect Location before collecting Supplier Site.
When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure
Collections Sequence Part A for Region, Location, and Customer Data

The following image shows the collections sequence to follow while collecting Regions, and Customers data from external source systems. This image represents only half of the entities for Item data.

When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data

The following image shows the collections sequence to follow while collecting Currency, Calendar, Demand Class, and UOM data from external source systems. Also, ensure that you collect Location before collecting Supplier Site.
Note: The Calendar entity is marked with an asterisk because there are other entities that are associated with Calendar that you must collect in a sequence. To collect other entities associated with Calendar, see the Calendar Upload Sequence figure.

Collection Sequence Part A for Currency, Calendar, Demand Class and UOM Data
Continue from the previous diagram, after Organization

- Planner
- Subinventory
- Carrier
- Supplier
- Item Cost
- Calendar Assignment
- Supplier Site

Continue to Collection Sequence Part B

When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure
Collection Sequence for Calendar Data

The following image shows the collections sequence to follow for collecting the Calendar data. Calendar data is a part of the data collection in Part A. You collect the Calendar data in the following subsection: Collection Sequence Part A for Currency, Calendar, Demand Class, and UOM Data.

Calendar Upload Sequence

- Calendar
- Calendar Shifts
- Calendar Exceptions
- Period Start Days
- Week Start Dates
- Calendar Workday Pattern
- Generate Calendar Dates Post Collection
Collections Sequence Part B for Sales Order and Assignment Sets

The following image shows the collections sequence to follow while collecting Sales Order and Assignment Sets data from external source systems. The data entities in Part B are dependent on Part A. So, you must collect entities listed in Part A before you collect the entities in Part B.
Collection Sequence Part B for Work Orders, Work Definition, and Item Structures

The following image shows the collections sequence to follow while collecting Work Orders, Work Definition, and Item Structure data from external source systems. The data entities in Part B are dependent on Part A. So, you must collect entities listed in Part A before you collect the entities in Part B.

Using the Import Templates to Create the CSV Files: Explained

You can use the Microsoft Excel templates (XLSM files) to prepare the data for the supported collection entities. The templates are listed in the following guide: File-Based Data Import for Oracle Supply Chain Management Cloud. Extract the templates to a local drive, enter appropriate data as described in the template, and generate CSV files. Compress the CSV
files to a zipped file format and upload the .zip file to the Universal Content Manager using the File Import and Export utility. The data is then loaded from the Universal Content Manager to the planning data repository.

**Collect Data for the Oracle Fusion Source**

The following table lists the collections entities that can be loaded into the planning data repository for the Oracle Fusion source. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import for Oracle Supply Chain Management Cloud guide (FBDI guide). The Link in Data Import Guide column provides the name of the topic in the FBDI guide from where you will download the template. For example, to collect data for the Item Costs collection entity, refer to the Item Cost Import topic in the FBDI guide.

<table>
<thead>
<tr>
<th>Collections Entity</th>
<th>Link in Data Import Guide</th>
<th>XLSM File Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Costs</td>
<td>Supply Chain Planning Item Cost</td>
<td>ScpItemCostImportTemplate. xslm</td>
</tr>
<tr>
<td>Customer Specific Item Relationships</td>
<td>Supply Chain Planning Item Substitute</td>
<td>ScpItemSubstituteImportTemplate. xslm</td>
</tr>
<tr>
<td>Planners</td>
<td>Supply Chain Planning Planners</td>
<td>ScpPlannersImportTemplate. xslm</td>
</tr>
<tr>
<td>Item Suppliers</td>
<td>Supply Chain Planning Approved Supplier List</td>
<td>ScpApprovedSupplierListImportTemplate. xslm</td>
</tr>
<tr>
<td>Demand Classes</td>
<td>Supply Chain Planning Demand Classes</td>
<td>ScpDemandClassImportTemplate. xslm</td>
</tr>
<tr>
<td>Allocation Assignments and Allocation Rules</td>
<td>Supply Chain Planning Planning Allocation Rules</td>
<td>ScpPlanningAllocationRulesImportTemplate. xslm</td>
</tr>
<tr>
<td>ATP Assignments and ATP Rules</td>
<td>Supply Chain Planning Available-to-Promise Rules</td>
<td>ScpATPRulesImportTemplate. xslm</td>
</tr>
<tr>
<td>Supply Update Rules</td>
<td>Supply Chain Planning Real Time Supply Updates</td>
<td>ScpRealTimeSupplyUpdatesImportTemplate. xslm</td>
</tr>
<tr>
<td>Booking History</td>
<td>Supply Chain Planning Bookings History</td>
<td>ScpBookingHistoryImportTemplate. xslm</td>
</tr>
<tr>
<td>Option Booking History</td>
<td>Supply Chain Planning Option Bookings History</td>
<td>ScpOptionBookingHistoryImportTemplate. xslm</td>
</tr>
<tr>
<td>Shipment History</td>
<td>Supply Chain Planning Shipments History</td>
<td>ScpShipmentHistoryImportTemplate. xslm</td>
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<tr>
<td>Option Shipment History</td>
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</tr>
<tr>
<td>Price Lists</td>
<td>Supply Chain Planning Price List</td>
<td>ScpPriceListImportTemplate. xslm</td>
</tr>
<tr>
<td>Causal Factors</td>
<td>Supply Chain Planning Causal Factors</td>
<td>ScpCausalFactorsImportTemplate. xslm</td>
</tr>
<tr>
<td>Forecast Measures</td>
<td>Supply Chain Planning Forecast Measures</td>
<td>ScpForecastMeasureImportTemplate. xslm</td>
</tr>
<tr>
<td>Collections Entity</td>
<td>Link in Data Import Guide</td>
<td>XLSM File Name</td>
</tr>
<tr>
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</tr>
<tr>
<td>Forecasts</td>
<td>Supply Chain Planning External Forecasts</td>
<td>ScpExternalForecastImportTemplate. xlsm</td>
</tr>
<tr>
<td>Safety Stock Levels</td>
<td>Supply Chain Planning Safety Stock Levels</td>
<td>ScpSafetyStockLevelImportTemplate. xlsm</td>
</tr>
<tr>
<td>Supplier Capacity</td>
<td>Supply Chain Planning Approved Supplier Capacity</td>
<td>ScpApprovedSupplierCapacityImportTemplate. xlsm</td>
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<tr>
<td>Planned Order Supplies</td>
<td>Supply Chain Planning Planned Order Supply</td>
<td>ScpPlannedOrderSupplyImportTemplate. xlsm</td>
</tr>
<tr>
<td>Sourcing Rule and Assignments</td>
<td>Supply Chain Planning Sourcing Rules</td>
<td>ScpSourcingImportTemplate. xlsm</td>
</tr>
<tr>
<td>Cross-Reference Mapping Information</td>
<td>Supply Chain Planning Cross-Reference Data</td>
<td>ScpCrossReferenceDataImportTemplate. xlsm</td>
</tr>
</tbody>
</table>

**Collect Data from External Source - Version Others**

The following table lists the collections entities that can be loaded into the planning data repository from an external source, where the version is Others. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import for Oracle Supply Chain Management Cloud guide (FBDI guide). The Link in Data Import Guide column provides the name of the topic in the FBDI guide from where you will download the template. For example, to collect data for the Items and Item Costs collection entities, refer to the Item Cost Import topic in the FBDI guide.

<table>
<thead>
<tr>
<th>Collections Entity</th>
<th>Link in Data Import Guide</th>
<th>XLSM File Name</th>
</tr>
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<tbody>
<tr>
<td>Item Costs</td>
<td>Supply Chain Planning Item Cost</td>
<td>ScpItemCostImportTemplate. xlsm</td>
</tr>
<tr>
<td>Customer Specific Item Relationships</td>
<td>Supply Chain Planning Item Substitute</td>
<td>ScpItemSubstituteImportTemplate. xlsm</td>
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<td>Planners</td>
<td>Supply Chain Planning Planners</td>
<td>ScpPlannersImportTemplate. xlsm</td>
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<tr>
<td>Organizations (Warehouses) and Organization Site (Including Organization Site - Internal Location Mapping)</td>
<td>Supply Chain Planning Organizations</td>
<td>ScpOrganizationImportTemplate. xlsm</td>
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<td>Subinventories</td>
<td>Supply Chain Planning Subinventories</td>
<td>ScpSubInventoryImportTemplate. xlsm</td>
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<tr>
<td>Suppliers and Supplier Sites</td>
<td>Supply Chain Planning Suppliers</td>
<td>ScpPlanningSupplierImportTemplate. xlsm</td>
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<td>Item Suppliers</td>
<td>Supply Chain Planning Approved Supplier List</td>
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<td>Interlocation Shipping Networks</td>
<td>Supply Chain Planning Interlocation Shipping Methods</td>
<td>ScpInterLocationShipMethodsImportTemplate. xlsm</td>
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<td>Collections Entity</td>
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<td>Currencies, Currency Conversion Types, and Currency Conversion Rates</td>
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<td>ScpCurrencyImportTemplate. xlsm</td>
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<tr>
<td>Units of Measure, Units of Measure Conversions, and Units of Measure Class Conversions</td>
<td>Supply Chain Planning Units of Measure</td>
<td>ScpUOMImportTemplate. xlsm</td>
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<td>Calendars, Calendar Exceptions, Calendar Shifts, Week Start Dates, Period Start Dates, and Calendar Shift Workday Pattern</td>
<td>Supply Chain Planning Calendars</td>
<td>ScpCalendarImportTemplate. xlsm</td>
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<td>Calendar Associations</td>
<td>Supply Chain Planning Calendar Assignments</td>
<td>ScpCalendarAssignmentsImportTemplate. xlsm</td>
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<td>Demand Classes</td>
<td>Supply Chain Planning Demand Classes</td>
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<td>Ship Mode of Transport, Ship Class of Service, and Carrier</td>
<td>Supply Chain Planning Carriers</td>
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<td>Allocation Assignments and Allocation Rules</td>
<td>Supply Chain Planning Allocation Rules</td>
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<td>ATP Assignments and ATP Rules</td>
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<td>ScpATPRulesImportTemplate. xlsm</td>
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<tr>
<td>Supply Update Rule</td>
<td>Supply Chain Planning Real Time Supply Updates</td>
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<td>Freight Terms, FOB Points, Invoicing and Accounting Rules, Shipment Priorities, Payment Terms, Return Reason, Tax Classification Code, Tax Exemption Reason, Sales Credit Type, Activity Type, Document Categories, Payment Methods, and Receipt Methods</td>
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<td>ScpOrderOrchestrationImportTemplate. xlsm</td>
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<td>Booking History</td>
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<td>Causal Factors</td>
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### Collections Entity

<table>
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<th>Collections Entity</th>
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<td>Forecasts Measures</td>
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<td>Safety Stock Levels</td>
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<td>On Hand</td>
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<td>Resources and Resource Shifts</td>
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<td>Resource Availability</td>
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<tr>
<td>Work Definition (Including mapping between Item Structures and Work Definitions), Work Definition Operations, and Work Definition Operation Resources</td>
<td>Supply Chain Planning Routings</td>
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<td>Work Order Supply</td>
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<td>Work Order Resource Requirements</td>
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</tr>
<tr>
<td>Sourcing Rule and Assignments</td>
<td>Supply Chain Planning Sourcing Rules</td>
<td>ScpSourcingImportTemplate. xlsm</td>
</tr>
</tbody>
</table>
Collect Data from External Source - Version External

The following table lists the collections entities that can be loaded into the planning data repository from an external source, where the version is External. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import for Oracle Supply Chain Management Cloud guide. The Link in Data Import Guide column provides the name of the topic in the File-Based Data Import for Oracle Supply Chain Management Cloud guide (FBDI guide) from where you will download the template. For example, to collect data for the Items and Item Costs collection entities, refer to the Item Cost Import topic in the File-Based Data Import for Oracle Supply Chain Management Cloud guide. All the planning-related entity names are prefixed with Supply Chain Planning in the FBDI guide.

<table>
<thead>
<tr>
<th>Collection Entities</th>
<th>Link in FBDI Guide</th>
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<tbody>
<tr>
<td>Items</td>
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<td>ScpItemImportTemplate. xlsm</td>
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<td>Item Costs</td>
<td>Supply Chain Planning Item Cost</td>
<td>ScpItemCostImportTemplate. xlsm</td>
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<tr>
<td>Item Relationships</td>
<td>Supply Chain Planning Item Substitute</td>
<td>ScpItemSubstituteImportTemplate. xlsm</td>
</tr>
<tr>
<td>Catalogs, Categories, and Item Categories</td>
<td>Supply Chain Planning Catalogs</td>
<td>ScpCatalogImportTemplate. xlsx</td>
</tr>
<tr>
<td>Item Structures</td>
<td>Supply Chain Planning Item Structures</td>
<td>ScpBillOfMaterialImportTemplate. xlsm</td>
</tr>
<tr>
<td>Bill of Resources</td>
<td>Supply Chain Planning Bill of Resources</td>
<td>ScpBillOfResourcesImportTemplate. xlsm</td>
</tr>
<tr>
<td>Planners</td>
<td>Supply Chain Planning Planners</td>
<td>ScpPlannersImportTemplate. xlsm</td>
</tr>
<tr>
<td>Customers and Customer Sites</td>
<td>Supply Chain Planning Customers</td>
<td>ScpCustomerImportTemplate. xlsm</td>
</tr>
<tr>
<td>Regions</td>
<td>Supply Chain Planning Regions</td>
<td>ScpRegionsImportTemplate. xlsm</td>
</tr>
<tr>
<td>Zones</td>
<td>Supply Chain Planning Zones</td>
<td>ScpZonesImportTemplate. xlsm</td>
</tr>
<tr>
<td>Region-Zone Mapping</td>
<td>Supply Chain Planning Region Zone Mappings</td>
<td>ScpRegionZoneMappingImportTemplate. xlsx</td>
</tr>
<tr>
<td>Locations and Region-Location Mapping</td>
<td>Supply Chain Planning Locations</td>
<td>ScpLocationsImportTemplate. xlsm</td>
</tr>
<tr>
<td>Organizations and Organization Sites</td>
<td>Supply Chain Planning Organizations</td>
<td>ScpOrganizationImportTemplate. xlsm</td>
</tr>
<tr>
<td>Collection Entities</td>
<td>Link in FBDI Guide</td>
<td>XLSM File Name</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Subinventories</td>
<td>Supply Chain Planning Subinventories</td>
<td>ScpSubInventoryImportTemplate. xlsx</td>
</tr>
<tr>
<td>Suppliers and Supplier Sites</td>
<td>Supply Chain Planning Suppliers</td>
<td>ScpSupplierImportTemplate. xlsx</td>
</tr>
<tr>
<td>Item Suppliers (Approved Supplier List)</td>
<td>Supply Chain Planning Approved Supplier List</td>
<td>ScpApprovedSupplierListImportTemplate. xlsx</td>
</tr>
<tr>
<td>Interlocation Shipping Networks and Transit Times</td>
<td>Supply Chain Planning Interlocation Shipping Methods</td>
<td>ScpInterLocationShipMethodsImportTemplate. xlsx</td>
</tr>
<tr>
<td>Currencies and Currency Conversions</td>
<td>Supply Chain Planning Currencies</td>
<td>ScpCurrencyImportTemplate. xlsx</td>
</tr>
<tr>
<td>Units of Measure, Units of Measure Conversions, and Units of Measure Class Conversions</td>
<td>Supply Chain Planning Units of Measure</td>
<td>ScpUOMImportTemplate. xlsx</td>
</tr>
<tr>
<td>Calendars, Calendar Exceptions, Shifts, Shift Workday Pattern, Week Start Dates, and Period Start Dates</td>
<td>Supply Chain Planning Calendars</td>
<td>ScpCalendarImportTemplate. xlsx</td>
</tr>
<tr>
<td>Calendar Associations</td>
<td>Supply Chain Planning Calendar Assignments</td>
<td>ScpCalendarAssignmentsImportTemplate. xlsx</td>
</tr>
<tr>
<td>Demand Classes</td>
<td>Supply Chain Planning Demand Classes</td>
<td>ScpDemandClassImportTemplate. xlsx</td>
</tr>
<tr>
<td>Carrier, Ship Mode of Transport, and Ship Class of Service</td>
<td>Supply Chain Planning Carriers</td>
<td>ScpCarrierImportTemplate. xlsx</td>
</tr>
<tr>
<td>GOP Allocation Rules and Rule Assignments</td>
<td>Supply Chain Planning Planning Allocation Rules</td>
<td>ScpPlanningAllocationRulesImportTemplate. xlsx</td>
</tr>
<tr>
<td>GOP ATP Rules and Rule Assignments</td>
<td>Supply Chain Planning Available-to-Promise Rules</td>
<td>ScpATPRulesImportTemplate. xlsx</td>
</tr>
<tr>
<td>GOP Supply Update Rules</td>
<td>Supply Chain Planning Real Time Supply Updates</td>
<td>ScpRealTimeSupplyUpdatesImportTemplate. xlsx</td>
</tr>
<tr>
<td>Order Orchestration Reference Objects: Freight Terms, FOB Points, Invoicing and Accounting Rules, Shipment Priorities, Payment Terms, Return Reason, Tax Classification Code, Tax Exemption Reason, Sales Credit Type, Activity Type, Document Categories, Payment Methods, and Receipt Methods</td>
<td>Supply Chain Planning Order Orchestration</td>
<td>ScpOrderOrchestrationImportTemplate. xlsx</td>
</tr>
<tr>
<td>Cross Reference Mapping Information</td>
<td>Supply Chain Planning Cross-Reference Data</td>
<td>ScpCrossReferenceDataImportTemplate. xlsx</td>
</tr>
<tr>
<td>Booking History</td>
<td>Supply Chain Planning Bookings History</td>
<td>ScpBookingHistoryImportTemplate. xlsx</td>
</tr>
<tr>
<td>Collection Entities</td>
<td>Link in FBDI Guide</td>
<td>XLSM File Name</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Option Booking History</td>
<td>Supply Chain Planning Option Bookings History</td>
<td>ScpOptionBookingHistoryImportTemplate. xlsm</td>
</tr>
<tr>
<td>Shipment History</td>
<td>Supply Chain Planning Shipment History</td>
<td>ScpShipmentHistoryImportTemplate. xlsm</td>
</tr>
<tr>
<td>Option Shipment History</td>
<td>Supply Chain Planning Option Shipments History</td>
<td>ScpOptionShipmentHistoryImportTemplate. xlsm</td>
</tr>
<tr>
<td>Price Lists</td>
<td>Supply Chain Planning Price Lists</td>
<td>ScpPriceListImportTemplate. xlsm</td>
</tr>
<tr>
<td>Causal Factors</td>
<td>Supply Chain Planning Causal Factors</td>
<td>ScpCausalFactorsImportTemplate. xlsm</td>
</tr>
<tr>
<td>Forecast Measures</td>
<td>Supply Chain Planning Forecast Measures</td>
<td>ScpForecastMeasureImportTemplate. xlsm</td>
</tr>
<tr>
<td>Fiscal Calendars</td>
<td>Supply Chain Planning Fiscal Calendars</td>
<td>ScpFiscalCalendarImportTemplate. xlsm</td>
</tr>
<tr>
<td>Measures, Sales and Operations Planning Backlog, Inventory, and Production History</td>
<td>Supply Chain Planning Measures</td>
<td>ScpMeasuresImportTemplate. xlsm</td>
</tr>
<tr>
<td>User-Defined Hierarchies</td>
<td>Supply Chain Planning User-Defined Hierarchies</td>
<td>ScpCustomHierarchyImportTemplate. xlsm</td>
</tr>
<tr>
<td>Forecasts</td>
<td>Supply Chain Planning External Forecasts</td>
<td>ScpExternalForecastImportTemplate. xlsm</td>
</tr>
<tr>
<td>Sales Orders</td>
<td>Supply Chain Planning Sales Orders</td>
<td>ScpSalesOrderImportTemplate. xlsm</td>
</tr>
<tr>
<td>Safety Stock Levels</td>
<td>Supply Chain Planning Safety Stock Levels</td>
<td>ScpSafetyStockLevelImportTemplate. xlsm</td>
</tr>
<tr>
<td>Supply Reservations to Sales Orders</td>
<td>Supply Chain Planning Reservations</td>
<td>ScpReservationImportTemplate. xlsm</td>
</tr>
<tr>
<td>On Hand</td>
<td>Supply Chain Planning Supply On Hand</td>
<td>ScpOnhandImportTemplate. xlsm</td>
</tr>
<tr>
<td>Purchase Orders, Purchase Requisitions, PO in Receiving, In Transits</td>
<td>Supply Chain Planning Purchase Order Requisitions</td>
<td>ScpPurchaseOrderRequisitionImportTemplate. xlsm</td>
</tr>
<tr>
<td>Transfer Orders (including expense type transfers)</td>
<td>Supply Chain Planning Transfer Orders</td>
<td>ScpTransferOrderImportTemplate. xlsm</td>
</tr>
<tr>
<td>Supplier Capacity</td>
<td>Supply Chain Planning Approved Supplier Capacity</td>
<td>ScpApprovedSupplierCapacityImportTemplate. xlsm</td>
</tr>
<tr>
<td>Resources, Resource Shifts</td>
<td>Supply Chain Planning Resources</td>
<td>ScpResourceImportTemplate. xlsm</td>
</tr>
<tr>
<td>Resource Availability</td>
<td>Supply Chain Planning Resource Availability</td>
<td>ScpResourceAvailabilityImportTemplate. xlsm</td>
</tr>
</tbody>
</table>
Collection Entities | Link in FBDI Guide | XLSM File Name
--- | --- | ---
Work Definition (including mapping between Item Structures and Work Definitions), Work Definition Operations, Work Definition Operation Resources | Supply Chain Planning Routings | ScpRoutingsImportTemplate.xlsm
Work Order Supply | Supply Chain Planning Work Order Supplies | ScpWorkOrderSuppliesImportTemplate.xlsm
Work Order Material Requirements | Supply Chain Planning Work Order Component Demands | ScpWIPComponentDemandsImportTemplate.xlsm
Work Order Resource Requirements | Supply Chain Planning Work Order Operation Resources | ScpWIPOperationResourceImportTemplate.xlsm
Planned Order Supplies | Supply Chain Planning Planned Order Supply | ScpPlannedOrderSupplyImportTemplate.xlsm
Sourcing Rule and Assignments | Supply Chain Planning Sourcing Rules | ScpSourcingImportTemplate.xlsm
Key Customer Options | Supply Chain Planning Key Customer Options | ScpKeyCustomerOptionsImportTemplate.xlsm

Loading Planning Data from Files: Procedure

To load planning data from files, first you must prepare the data you want to load. To prepare the data, download the relevant XLSM template, update the XLSM template with required data, and create the necessary CSV files for upload. This procedure explains how to load planning data from files after you have prepared the data and created CSV files.

1. From the Navigator, use the File Import and Export page to upload the previously prepared and zipped CSV files to the Universal Content Manager. Use the account scm/planningDataLoader/Import to upload the zipped file.

   **Note**: For more information about uploading files to the Universal Content Manager server, see the following section in the Oracle SCM Cloud Implementing Common Features for Oracle SCM Cloud guide: External Integration chapter, External Data Integration Services for Oracle Cloud section.

2. From one of the Supply Chain Planning work areas or Setup and Maintenance work area, Supply Chain Planning offering, select the Load Planning Data from Files task.

3. Complete the following parameters on the Load Planning Data from Files page:
   
   a. Select the source system.
   
   b. Select Collection Type: **Net change** or **Target**.
   
   c. Select the .zip file you previously imported into the Universal Content Manager.

4. Click **Submit**. Make a note of the process ID. You will need this process ID to review the status of the process.
Verifying Collection Processes and Reviewing Data in the Planning Data Repository

Verifying the Load Planning Data Process: Procedure

Perform the following steps to verify the process status of the uploaded file and review log file for any errors or warnings.

1. In the Navigator, click Scheduled Processes.
2. In the search area, enter the process ID you noted when you submitted during the Load Planning Data process. Click Search.
3. Monitor the process to verify completion.
   - If the process completes with warnings, select the request that shows the warning status and click the View Log button to review the details.
4. For the rows with errors, resolve the issues found in the log file, and then upload the CSV file again. To load only the revised rows, use the Net Change option.

Reviewing Data in the Planning Data Repository: Explained

You can review the data collected or loaded into the planning data repository using two different options. The option you use depends on which data collection entities you want to review.

To review the data collected or loaded into the planning data repository, use one of the following options:

- Review data using the Plan Inputs page layout
- Review data using the Maintain Supply Network Model page

To review the following entities, use the Maintain Supply Network Model page:

- Organizations
- Customers
- Suppliers
- Carriers
- Interlocation Shipping Networks

To review data that is not part of the supply network model, use the Plan Inputs page layout. You can view the following data in the Plan Inputs page layout:

- Supply data
- Demand data

You can view Carriers and Suppliers using either option.

Review Data Using the Plan Inputs Page Layout

Perform the following steps to review the planning data that you loaded.

1. In the Navigator, click Plan Inputs.
2. From the Plans menu, right-click Plan Inputs and click Open.

3. On the Plan Inputs page, click Open, and click Full Pane.
4. On the Open Table, Graph, or Tile Set page, search for the table name.
5. Enter the criteria for the data you want to verify and click Search.
6. Review the data in the Search Results table.

### Review Data Using the Maintain Supply Network Model Page

Perform the following steps to review the planning data using the Maintain Supply Network Model page.

1. In the Navigator, click Plan Inputs.
2. From the Tasks menu, click Maintain Supply Network Model.
3. Enter the criteria for the data you want to verify and click Search.
4. Review the data in the Search Results table.

### Aggregating Customer Data

#### Aggregate Customer Data: Overview

Use the key customer data options collections template to identify key customers. The data for these customers will be visible. For each Zone, all non-key customers’ data will be aggregated to a member named All Other. By aggregating the planning data for non-key customers, you can focus your analysis on the key customers. You use the ScpKeyCustomerOptionsImportTemplate.xlsx to identify the key customers; the rest of the customers’ data will be aggregated under an All Other member.

The data that are not identified in the upload template are aggregated to an all other member for each zone. You can view the key customers and the All Other member containing the aggregated non-key customer data when you analyze the forecasts and other data.

Identifying key customers and aggregating non-key customer data helps you to do the following:

- Organize key customer data that are required for planning
- Save time by collecting only the required data from Oracle Supply Chain Management Cloud
• Build a plan specifically for your key customers

How can I reset the key customer aggregated data for a plan?

After you make changes to the aggregation level values in the ScpKeyCustomerOptionsImportTemplate.xlsm file, you must upload the file and run the plan again.

To reset the key customer aggregated data for a plan, do the following:

1. Review the ScpKeyCustomerOptionsImportTemplate.xlsm file.
2. Update the Aggregation Level values for all of the Level Name values (for example, Customer) and upload the CSV file.
3. From your Supply Chain Planning work area, open the plan and enable the Aggregated non-key customer data to All Other level member check box. Run the plan again.

Using the Key Customer Options Template: Points to Consider

When using one of the Supply Chain Planning work areas, you can differentiate between key customers and non-key customers. Use the ScpKeyCustomerOptionsImportTemplate.xlsm file to identify the key customers for which non-aggregated data must be made available. For non-key customers, the aggregation level that you define in the import template determines whether the data must be retained or aggregated.

The key customers are identified in the KeyCusOptnHeader tab by entering the name of a valid customer hierarchy in the Hierarchy Name column and entering a valid level of that hierarchy in the Level Name column. All customers in this level are identified as key customers. To have only certain customers identified as key customers, enter the specific customer names in the KeyCusOptnMembers detail tab.

Note: For details regarding the ScpKeyCustomerOptionsImportTemplate.xlsm file, refer to the File-Based Data Import for Oracle Supply Chain Management Cloud guide. This guide is one of the guides for Oracle Supply Chain Management Cloud Release 13 (update 18C), in the Development category. Use the Books link for a list of the guides by category.

You can use the aggregated key customer data to build a plan specifically for your key customers.

Define the key customers in the template and set the aggregation level values for both key and non-key customers, and upload the template. Use the settings in the template to set the data to different aggregation levels, such as 1, 2, or 3.

Aggregation Levels

The aggregation levels are listed in the following table.

<table>
<thead>
<tr>
<th>Aggregation Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retain and aggregate non-key customer sites. In addition to key customer data being available, non-key customer data is retained for plans that require data that is not aggregated. Aggregated customer data is available for plans that require aggregated non-key customer data.</td>
</tr>
<tr>
<td>2</td>
<td>Aggregate non-key customer sites. Customers that are not identified as key customers are aggregated to an All Other site by zone. However, if the Hierarchy Name and Level Name columns are blank, all customers are identified as non-key customers and aggregated to an All Other site by zone. This means that there are no key customers.</td>
</tr>
</tbody>
</table>
### Aggregation Level

<table>
<thead>
<tr>
<th>Aggregation Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>No aggregation of customer sites. All data is available at customer site level.</td>
</tr>
</tbody>
</table>

When you create a plan with key customers, data is available at the lowest level for key customers, and data for non-key customers is aggregated to an All Other member.

To remove the key customer designation for previously-loaded customers, use Aggregation Level 3. This enables data for all customers to be made available at the lowest level. No customers are marked as key customers.

Selecting Aggregation Level 3 results in the following:

- No aggregation is done. All data is at the customer site level only.
- If option 2 or 3 was used in previous collection runs, all non-key customer by zone members and data are deleted.
- Plans using the Key Customer feature become invalid and you have to run them again.

The KeyCusOptnMembers detail tab is optional. Use this tab to identify specific customers as key customers. The Hierarchy Name and Level Name column entries must be the same as the information entered on the KeyCusOptnHeader tab. Enter valid level member names in the Level Member Name column. These members are the only customers that will be identified as key customers.

- If the KeyCusOptnMembers detail tab is empty, all child members of the hierarchy level chosen in the Header tab are flagged as key customers.
- If the KeyCusOptnHeaderMembers detail tab is not empty, only the listed members are identified as key customers.

The members must be children of the hierarchy level named on the Header tab.

When you create a plan, there is an option in the Plan Options dialog box that determines what level of customer aggregation is used for the plan:

- Key customer data is available, and non-key customer data is aggregated to a level member named All Other.
- No customer data is aggregated for the plan if the option is unchecked.

### Loading Aggregated Customer Data from Oracle E-Business Suite: Procedure

This topic explains the procedure you follow to load aggregated customer data from an Oracle E-Business Suite source system into your Oracle Supply Chain Planning Cloud destination system.

The procedure is comprised of the following steps:

1. Extract data from your Oracle E-Business Suite source system.
2. Prepare the Supply Chain Planning Key Customer Options file if you have defined key customers in your Oracle E-Business Suite source system.
3. Add the files to your desktop or local hard drive.
4. Import data into your Oracle Supply Chain Planning Cloud destination system.

Additional details for each step are provided in this topic.
Prerequisites
To perform the process required to extract data from your Oracle E-Business Suite source system, you must have an administrator role (Advanced Planning Administrator or Advanced Supply Chain Planner).

Your source system must be set up as one of the Trading Community Source Systems for Oracle Supply Chain Planning Cloud.

You can perform the steps to import data into your Oracle Supply Chain Planning Cloud destination system from one of the Supply Chain Planning work areas. You do not need an administrator role to perform these steps.

Extract Data
To extract the data from your Oracle E-Business Suite source system, run the Extract Data for Oracle Supply Chain Planning Cloud process.

Consider the following conditions for the MSD_DEM_CUSTOMER attribute when you run the process:

- If the MSD_DEM_CUSTOMER_ATTRIBUTE is set to null, then all sites are extracted.
- If the MSD_DEM_CUSTOMER_ATTRIBUTE is set to none, then all records are aggregated to Default Customer Site.
- If the MSD_DEM_CUSTOMER_ATTRIBUTE is set to a valid customer attribute, then all sites are extracted.

The extracted data is stored in a file in the zipped file format in the middle tier of your source system.

Prepare the Key Customer Options File
If you have defined key customers in your Oracle E-Business Suite source system, then perform these steps to prepare the Supply Chain Planning Key Customer Option file:

1. Download the template for file-based data loads for the Supply Chain Planning Key Customer Options object.
2. Add your data to the file.
3. Generate the CSV file.

For details on preparing files for loading planning data, refer to these help topics: Loading Planning Data from Files: Overview and Creating CSV Files Used to Load Planning Data: Procedure.

Add the Files to Your Desktop or Local Hard Drive
Locate the extracted Zip file on your Oracle E-Business Suite middle tier, and download or transfer the file to your desktop or local hard drive.

If you have defined key customers in the Oracle E-Business Suites source system, then include the Key Customer Options file in the Zip file.

Import Data into Your Oracle Supply Chain Planning Cloud Destination System
To import the data into your Oracle Supply Chain Planning Cloud destination system, perform these steps:

1. From the Navigator, click File Import and Export.
2. On the File Import and Export page, perform the upload action using these values:
   - File: The file you created
   - Account: scm/planning DataLoader/Import
3. From one of the Supply Chain Planning work areas, perform the Manage Planning Source Systems task to check if your source system is already created. If your source system is not already created, then create it with the following values:
   - Version: External.
   - Code: Must be the same as the one used for your Oracle E-Business Suite source system.

4. From a Supply Chain Planning work area, perform the Load Planning Data from Files task.
6 Manage Demand Plans

Managing Plans: Explained

The Actions menu on the Manage Plans and the Edit Plan pages are integrated plan management pages for all plan types. When you open the Edit Plan page, note that only the plan name displays in the heading.

⚠️ Note: Not all action options are available on both the Manage Plans page and the Edit Plan page. For example, the Compare action is only available when you are in an open plan on the Edit Plan page. Also, not all action options are available for all plan types or work areas. For example, the Planning Central work area does not include Archive, Compare, or Copy to Simulation Set in the Action menu.

The following table lists the available options in the Actions menu and the description of each option.

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve</td>
<td>Initiate and complete the approval process for a plan. When you rerun the plan, the Approved status is removed from the Approval Status column.</td>
</tr>
<tr>
<td>Archive</td>
<td>Archive a plan.</td>
</tr>
<tr>
<td>Cancel Compare</td>
<td>Cancel the comparison of plan data.</td>
</tr>
<tr>
<td>Close</td>
<td>Close a loaded plan from memory. This option is not available for Demand Plan types.</td>
</tr>
<tr>
<td>Compare</td>
<td>Compare plan data with another plan.</td>
</tr>
<tr>
<td>Copy to Simulation Set</td>
<td>Open the Copy to Simulation Set dialog box to copy plan data to an existing simulation set. Plan data includes items, resource availability, bill of resources, and so on. This option is available only for Supply Plan and Demand and Supply Plan types.</td>
</tr>
<tr>
<td>Create</td>
<td>Open the Create Plan dialog box where you can define the plan options for your new plan. Depending on your plan type, define the scope, demand, safety stock, and supply options. The Safety Stock tab is not available for Sales and Operations Plan types.</td>
</tr>
<tr>
<td>Delete</td>
<td>Delete a plan and its archive versions. This irrevocable action purges the plan from memory and the database.</td>
</tr>
<tr>
<td>Duplicate</td>
<td>Create a copy of an existing plan to leverage previously defined plans or to perform what-if simulation analysis. You can decide whether you want to copy only the plan options or copy the plan options including plan data.</td>
</tr>
<tr>
<td>Edit Plan Options</td>
<td>Open the Plan Options dialog box where you can edit your plan options. Depending on your plan type, you can change the scope, demand, safety stock, and supply options.</td>
</tr>
<tr>
<td>Export</td>
<td>Export the data from the Search Results table on the Manage Plans page to a spreadsheet.</td>
</tr>
<tr>
<td>Action</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Load</td>
<td>Load the plan into memory. This option is available only for Sales and Operations Plan types.</td>
</tr>
<tr>
<td>Manage Tables, Graphs, and Analysis Sets</td>
<td>Open the Manage Tables, Graphs, and Analysis Sets dialog box. You can search for tables, graphs, tiles, tile sets, and analysis sets and manage them.</td>
</tr>
<tr>
<td>Open</td>
<td>Open the Edit Plan page for an existing plan. Note that only the plan name displays in the page heading.</td>
</tr>
<tr>
<td>Publish Order Forecast</td>
<td>Starts the Publish Order Forecast job. You can publish the order forecast without saving the plan to the database. This option is available in the Actions menu on the Items, Supplies and Demands, and Manage Plans page. This option is available only for Supply Plan, and Demand and Supply Plan types.</td>
</tr>
<tr>
<td>Publish Plan Data</td>
<td>Publish the plan data.</td>
</tr>
<tr>
<td>Release</td>
<td>Release the plan from the Supply Chain Planning work area to another plan execution system. This option is available only for Supply Plan, and Demand and Supply Plan types. The Release action integrates Supply Chain Planning with other plan execution systems by publishing approved planning recommendations to execution systems. These plan recommendations can be in the form of new planned orders, rescheduled existing supplies, and canceled existing supplies.</td>
</tr>
<tr>
<td>Request Approval</td>
<td>Request approval of a plan. This option is available only for Sales and Operations Plan types.</td>
</tr>
<tr>
<td>Reset Approval Status</td>
<td>Reset the approval status. This option is not available for Supply Plan types.</td>
</tr>
<tr>
<td>Review Plan Messages</td>
<td>Open the Review Plan Messages tab to review the warning and error messages generated by the planning processes, such as forecast generation and supply plan generation. You can also review the recommendations to address the warning and error conditions.</td>
</tr>
<tr>
<td>Run</td>
<td>Run the plan and generate data.</td>
</tr>
<tr>
<td></td>
<td>When you click Run, the Run Plan dialog box opens. In the Run Plan dialog box, you can select data refresh options, scope options, and demand and supply plan run options to generate planning data.</td>
</tr>
<tr>
<td>Save Plan to Database</td>
<td>Save the plan from the memory to the database. The benefit of saving a plan to the database is that you can perform plan analysis without first loading the plan. This option is available only for Supply Plan and Demand and Supply Plan types.</td>
</tr>
<tr>
<td>View Status Details</td>
<td>Open the Plan Status Details dialog box to view all of the actions performed by any user for the selected plan. You can also export status details to a spreadsheet.</td>
</tr>
</tbody>
</table>

**Related Topics**

- Supply Chain Planning Plan Types: Explained
Creating a Plan: Procedure

You can create plans and then duplicate them to save time and perform planning activities incrementally. For example, you have defined the line of business associated with an existing plan, such as organizations and items. You can create a copy from that existing plan rather than define a new plan.

Use this generic procedure to create and run a plan:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click the Tasks panel tab.
3. In the Tasks panel drawer, click the Manage Plans link.
4. In the Search Results region, from the Actions menu, select Create.
5. Complete the following information for the plan:
   a. Enter a name.
   b. (Optional) Provide a description for the plan.
   c. Select the plan type.
   d. (Optional) Select the Enable for OTBI reporting check box to make measures from a plan available in Oracle Transactional Business Intelligence (OTBI) for reporting.
   e. Select the owner.
   f. Define the access level:
      i. Select Public to make the plan accessible for all users.
      ii. Select Private to restrict the plan accessible to you and to a list of users that you want to provide access.
6. Based on the type of plan that you selected, complete the required information in one or more tabs (Scope, Demand, Safety Stock, and Supply).
7. Click Save and Close.
8. Click Actions menu and select Run.

Enabling Plans for OTBI Reporting: Explained

Oracle Transactional Business Intelligence (OTBI) is a real-time, self-service reporting solution that helps you create user-defined and interactive reports. You can enable OTBI reporting for plans created in your Supply Chain Planning work area to:

- Run reports in real-time to analyze supply, demand, and sales and operations planning plans
- Generate user-configurable and easy-to-use reports by using business intelligence tools and charts
- Analyze key metrics, such as exception metrics, inventory balances, pegged quantity, and orders to be released
- Compare two or more plans that are enabled for OTBI reporting

To improve your supply chain performance, you can monitor and identify problem areas by using strategic insights into live and operational data. Compare different scenarios in real-time by using key measures to decide the best course of action. You can respond to changes by modeling complex strategies and plans to analyze and compare them. You can also define native OTBI capabilities like alerts based on exception conditions, user-defined measures, and conditional formatting to monitor or track problem areas.
To create OTBI reports, navigate to the Oracle Fusion Reports and Analytics work area. You can build reports by using the base measures available in your Supply Chain Planning work area. You can also create user-defined measures based on the base measures by using the standard business intelligence tools.

To open OTBI reports in a Supply Chain Planning work area, save the OTBI reports into the Report Components subfolder within the Transactional Analysis Samples folder. The Report Components folder is located in the shared Supply Chain Planning folder in the Reports and Analytics work area.

To enable OTBI reporting for plans, you must do the following:

- Select the **Enable for OTBI reporting** check box on the Plan Options page of your supply, demand, or sales and operations plan.

  ![Note](image.png) **Note:** You must run the plan after you enable it for OTBI reporting.

- Set up reporting hierarchies by configuring the Product and Time hierarchies in the dimension catalog named Reporting Catalog. To configure the Product and Time hierarchies, use the Configure Planning Analytics task in your Supply Chain Planning work area. Depending on the reports that you want to generate, move the Product and Time hierarchies from the Available Hierarchies pane to the Selected Hierarchies pane. If you select multiple Product and Time hierarchies, ensure that you select a default hierarchy for the Product and Time hierarchies. The default hierarchies are used by default in the predefined reports.

You can build reports by using the base measures available in your Supply Chain Planning work area. You can also create user-defined measures based on the base measures by using the standard business intelligence tools.

### Accessing the OTBI Reports

To access the OTBI reports:

1. In a Supply Chain Planning work area, open a plan that is enabled for OTBI reporting.
2. Click the **Open** button and then select a pane.
3. In the Open Table, Graph, or Tile Set dialog box, do one of the following:
   - Search for your report.
   - Filter the list by selecting **Type** and then **Report**.
4. Select a report and then click **OK**.

   The OTBI report opens in the context of the current, open plan.

When you search for reports, the list of reports in the search results includes predefined reports and user-defined reports created by you. You must save the user-defined reports into the Reports Components subfolder within the Transactional Analysis Samples folder to make them available in the Supply Chain Planning work areas. The following predefined reports are available only in the Oracle Fusion Supply Planning and Oracle Fusion Planning Central work areas:

- **Build Plan by End Item**
- **Exception Summary by Item Order**
- **Details by Item**
- **Pegging Details by End Item**
- **Plan Recommendations Summary Graph**
Available Measures

The following measures are available in the Oracle Fusion Reports and Analytics work area:

- Configure to Order Forecast Metrics: The following configure to order forecast metrics are available for demand plans, and demand and supply plans:
  - Final Option Demand Forecast
  - Final Planning Percent
  - Option Demand Forecast

  Configure to order forecast metrics support dimensions, such as Plan, Time, Product, Organization, Customer, Top Model, and Demand Class.

- Demand Management Metrics: The following demand management metrics are available for demand plans, and demand and supply plans:
  - Bookings Forecast
  - Bookings History
  - Bookings History Value
  - Final Bookings Forecast
  - Final Shipments Forecast
  - Shipments Forecast
  - Shipments Forecast Value
  - Shipments History
  - Shipments History Value

  Demand management metrics support dimensions, such as Time, Product, Organization, Customer, and Demand Class.

- Exception Metrics: The following exception metrics are available for supply plans, and demand and supply plans:
  - Exception Count
  - Exception Quantity
  - Exception Days
  - Exception Ratio
  - Exception Value

  Exception metrics support dimensions, such as Plan, Time, Product, Organization, Customer, Supplier, Manufacturing Resource, and Exception Type.

- Order Metrics: The following order metrics are available for supply plans, and demand and supply plans:
  - Order Quantity
  - Implemented Supply Quantity
  - Order Value

  Order metrics support dimensions, such as Plan, Time, Product, Organization, Order Details, and Order Type.
• Pegging Metrics: The following pegging metric is available for supply plans, and demand and supply plans:

  o Pegged Quantity

  Pegging metric supports dimensions, such as Plan, Time, Product, Organization, Customer, Supplier, End Demand, and Order Type.

• Sales and Operations Planning Metrics: The following sales and operations planning metrics are available for sales and operations plans:

  o Consensus Forecast
  o Consensus Forecast Value
  o Final Sales Forecast
  o Final Sales Forecast Value
  o Sales Forecast
  o Sales Forecast Value

  Sales and operations planning metrics support dimensions, such as Plan, Time, Product, Organization, Customer, and Demand Class.

Copying a Plan: Procedure

You can create plans and then duplicate them to save time and perform planning activities incrementally. For example, you have defined the line of business associated with an existing plan, such as organizations and items. You can create a copy from that existing plan rather than define a new plan.

Use the Duplicate procedure to:

• Create a copy of an existing plan that includes the plan data.
• Create only a copy of plan options.

To copy a plan:

1. Navigate to the Create Plan dialog box:

   a. In the Navigator, click a Supply Chain Planning work area link.
   b. Click the Tasks panel tab.
   c. In the Tasks panel drawer, click the Manage Plans link.
   d. Enter the search parameters and click the Search button.
   e. In the Search Results region, select the plan that you want to copy, click Actions, and then select Duplicate.

2. In the Create Plan dialog box, complete the following information for the plan:

   a. Select a copy type:

      • **Copy plan options only**: The planning process copies plan options to the duplicate plan, but not the plan data.

      Typically, when you duplicate the plan with the Copy plan options only option, the next step is to edit the plan options before running the plan.
**Copy plan with reference to base plan:** When you duplicate the plan with reference to the base plan, the next step is to open the copied plan as you are likely to make edits before running the plan. On the Manage Plans page, the Copied From column displays the name of the plan that you copied from.

**Note:** If you delete the base plan or rerun the base plan with the Refresh with current data option, plans copied from the base plan become invalid.

**Copy all plan data with no reference to base plan:** The planning process makes a full, standalone copy of the plan. On the Manage Plans page, the Copied From column is blank. This option is not available for Demand Plan or Sales and Operations Plan types.

1. Enter a name and a description.
2. Define the access level:
   - Select **Public** to make the plan accessible for all users.
   - Select **Private** to restrict the plan accessible to you and to a list of users that you want to provide access.
3. (Optional) Select the **Load plan after copy** check box. This check box is not available for Demand Plan or Sales and Operations Plan types.
4. Select the owner.
5. Click **Save and Close**

### Viewing a Plan: Procedure

If you already have an existing plan, you can open the plan from the Plans drawer or by using the Manage Plans task. You must always run a plan before you can view it.

To open an existing plan from the Plans drawer to view it, do the following:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click the **Plans** drawer.
3. Expand **Plans**, and select the plan of your choice.
4. Click the **Actions** button and select **Open**.

**Tip:** If you have many plans, you have an option to search a plan by using the **Manage Plans** task. In this case, provide appropriate search criteria and click **Search**. In the search results area, select your plan and click the **Action** button and select **Open**. Oracle recommends this method to view sales and operations plans.

### Defining and Managing Plan Options
Defining Scope Plan Options: Explained

Scope options determine the scope of the plan. Define or modify scope plan options on the Create Plan page, Scope tab or the Edit Plan Options page, Scope tab. You can configure plan organizations, items, time horizon, and planning level for demand forecasting. You can also define the filters for a plan, such as the hierarchy, level, and level members.

The Scope tab includes the following sections:

- Plan Organizations
- Forecasting Items (available only for demand plans or demand and supply plans)
- Supply Planned Items (available only for supply plans or demand and supply plans)
- Plan Parameters

Plan Organizations

Specify a hierarchy, level, and level members by which to filter the plan. Also, select the source system code to use for filtering organizations. Fields in the Plan Organizations section are required. If you select a level that is above the organization level, then organizations that belong to that parent level will be included in the plan.

Forecasting Items

Specify a hierarchy, level, and level members by which to filter specific items for demand planning. Your selections are used in conjunction with your selections in the Plan Organizations section. Items that belong to a parent level will be included. Fields in this section are not required. However, if you do not specify a hierarchy, level, and level members, then you cannot filter supply planned items. In this situation, your plan will include all planned items in the selected organizations, which can have performance implications.

**Note:** The Forecasting Items section is not available for supply-only plans.

Supply Planned Items

For Supply Planned Item Type, select Manufacturing Plan (MRP) or Production Plan (MPS).

For Supply Planned Items, select the option to control the items to include in the supply plan. Options are:

- All planned items: This option can have performance implications.
- Demand plan items and all sales orders
- Demand plan and WIP components
- Demand plan items only
- Demand plan items, WIP components, and all sales orders

**Note:** The Supply Planned Items section is not available for demand-only plans.

Plan Parameters

The Plan Parameters section is available for plans of the plan types Demand Plan, Supply Plan, and Demand and Supply Plan.

The following table describes the plan parameters.
### Parameter | Definition
--- | ---
Plan Horizon Days | Number of days in the plan. Set horizon days to forecast and plan for future needs. Minimize horizon days to avoid long-running plans. Default is 180 days.
Forecasing Calendar or Planning Calendar | For a plan of type Supply and Demand Plan, you set the forecasting calendar on the Scope tab. The calendar must belong to the dimension catalog associated with the plan. For a plan of type Demand Plan, you set the planning calendar on the Scope tab. The calendar must belong to the dimension catalog associated with the plan.
Forecasting Time Level or Planning Time Level | For a plan of type Supply and Demand Plan, you set the forecasting time level, the time level used by forecast profiles, on the Scope tab. The time levels you can select depend on the selected forecasting calendar. For a plan of type Demand Plan, you set the planning time level on the Scope tab and you set the Forecasting time level on the Demand tab. The time levels you can choose depend on the selected planning calendar.
Measure Catalog | Group multiple sets of measures for use in a plan. By enabling only those measures that are needed for any specific plan, you can perform a focused analysis with improved performance. A planning administrator can create and modify measure catalogs.
Price Lists | Price list used in revenue calculations. The default price list for use in value calculations is Item List Price, defined in Items table for Organization and Item.
Exception Set | Lists exceptions to compute as part of a plan and also filters on Organizations and Categories for computing exceptions.
Simulation Set | Lists simulation sets to use in your plan. A simulation set is a set of adjustments to plan inputs. Apply a simulation set to a plan to model different business scenarios.

**Related Topics**
- Dimensions and Dimension Catalogs: Explained
- Why can’t I select Supply Planned Items

### Transfer Order Forecast Consumption: Explained

In Oracle Supply Chain Planning Cloud, you can use internal orders, also known as transfer orders, to track movement of product between locations. Transfers and transfer demand can be modeled by including both the transfer from and the transfer to organizations in the plan. However, you can also choose to model transfer orders as independent demand during the forecasting and forecast consumption processes when you need to plan the source location but not the destination location.

When you create a demand plan or a supply and demand plan that includes transfer orders, the plan can only include the source organization. The forecasts will account for the supplies needed at the source organization. If you set up the plan with both source and destination organizations, then the planning process won’t create a transfer forecast. Transfer orders between organizations in the same demand plan are excluded so that demand is not counted twice. An organization forecast can include both sales orders and transfers orders.
The transfer order history is collected into Demand Management and Demand Management creates a forecast for the transfers. The transfer forecast will come into supply planning, and supply planning will also get transfer orders and consume, or reduce, the forecast appropriately.

The general setup for transfer order forecast consumption involves the following steps:

1. On the Maintain Supply Network Model page:
   a. Associate the organization to the customer and customer site.
   b. If the customer and customer site is for interorganization transfers, then select the Use Customer and Customer Site for Interorganization Transfers check box.

   **Note:** You must set up these parameters on the Supply Network Model page before you can collect historical transfer orders.

2. On the Collect Planning Data page, Parameters tab:
   a. Select your source system and then select Targeted for your collection type.
   b. On the Demand Planning Data subtab, select our shipments and bookings history measures in the History Measures and Attributes section.
   c. On the Demand Planning Data subtab, select the Collect historical transfer orders check box in the History Data Options section.
      Selecting this check box results in the planning process including the transfer orders with the sales orders when you collect the historical data.

3. In the Demand: Advanced Options dialog box, select the Include transfer orders check box to include transfer order history in the demand plan.
   When you select the check box, then transfer order history is brought into demand planning, except when the transfer order history is between two organizations that are in the same demand plan.

   **Note:** The Include transfer orders check box is available only for demand plans or demand and supply plans from a Demand Management or a Demand and Supply Planning work area.

### Consumption of Forecasts Based on Transfers by Planning Central and Supply Planning

Oracle Planning Central Cloud and Oracle Supply Planning Cloud do not collect historical data, but they can get historical data from Demand Management. First, you must select the demand plan or demand and supply plan in the Demand Schedules section on the Plan Options page, Supply tab, Organizations and Schedules subtab. Next, the forecast consumption process checks the demand schedule advanced plan option Include transfer orders. If you selected this check box for your demand plan, then transfer order demands consume the forecasts at the transfer organization in the demand schedule.

When you feed a demand plan as a demand schedule to Planning Central, Planning Central gets a transfer forecast from the demand plan. For example, you feed a demand plan that includes a transfer forecast for ORG-X and the plan in Planning Central plans for ORG-A and ORG-B. Planning Central gets that transfer order forecast for ORG-X where it’s transferring from ORG-A, and the Planning Central plan consumes it.

### Related Topics
- Maintaining Supply Network Model: Explained
- Collecting from the Oracle Fusion Source Using the Targeted Collection Type: Procedure
Storing Plan Data at Aggregate Time Levels: Points to Consider

For plans of the Demand Plan plan type, you select a planning time level to determine whether plan data is stored at aggregate time levels. Storing the demand signal data at a daily level is not efficient if you forecast using demand signals at aggregate levels, such as weekly and monthly. When your data is stored at aggregate time levels, embedded analytics are more responsive and perform faster across your demand plan. This decision is applicable to the Demand Management, Demand and Supply Planning, and Planning Central work areas. Your choices for your forecasting time level will be based on what you selected for your planning time level.

Planning Time Level Parameter

The Planning Time Level parameter is located in the Plan Parameters section of the Scope tab on the Plan Options page. Your selection for the Planning Time Level parameter determines the time level at which the plan data is stored. The values available for the Planning Time Level parameter are based on what you selected for the Planning Calendar parameter as follows:

- Gregorian calendar: Day or Month
- Manufacturing calendar: Day, Week, or Period

Forecasting Time Level Parameter

For plans of the Demand Plan plan type, the Forecasting Time Level parameter is located on the Demand tab of the Plan Options page. The selections available for the Forecasting Time Level parameter are limited to the selected planning time level, and any parent levels above it, in the selected planning calendar. For example, if the Month level in the Gregorian planning calendar is selected for the planning time level, then the Forecasting Time Level parameter is limited to Month, Quarter, and Year.

Configuration Examples: Weekly and Monthly Demand Plans

Weekly Demand Plan: The following table shows an example of a configuration for a weekly demand plan.

<table>
<thead>
<tr>
<th>Parameter Location</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Parameters section of the Scope tab</td>
<td>Planning Calendar</td>
<td>a manufacturing calendar</td>
</tr>
<tr>
<td>Plan Parameters section of the Scope tab</td>
<td>Planning Time Level</td>
<td>Week</td>
</tr>
<tr>
<td>Demand tab</td>
<td>Forecasting Time Level</td>
<td>Week</td>
</tr>
</tbody>
</table>

Monthly Demand Plan: The following table shows an example of a configuration for a monthly demand plan.

<table>
<thead>
<tr>
<th>Parameter Location</th>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan Parameters section of the Scope tab</td>
<td>Planning Calendar</td>
<td>Gregorian calendar</td>
</tr>
<tr>
<td>Plan Parameters section of the Scope tab</td>
<td>Planning Time Level</td>
<td>Month</td>
</tr>
<tr>
<td>Demand tab</td>
<td>Forecasting Time Level</td>
<td>Month</td>
</tr>
</tbody>
</table>
Adding Forecasting Profiles to Demand Plans: Explained

Demand plan options determine the forecasting profiles to include as part of a demand plan run. Define forecasting profile options for a demand plan in a Supply Chain Planning work area on the Plan Options page, Demand tab or the Edit Plan Options page, Demand tab. The Demand tab is not available for supply plan types.

In the Forecast Profiles region, select which forecasting profiles will be available for the demand plan run. You can also indicate the amount of historical data used for forecast generation. When you run the demand plan, the forecast profiles run in the specified order.

The demand planning engine can generate statistical demand forecasts at different time levels such as day, week, or month. Specify the time level in the Forecasting Time Level field on the Plan Options page, Scope tab.

Note: For sales and operations plans types, the demand planning engine can generate statistical demand forecasts at week or month time levels. You specify the time level in the Planning Time Level field on the Plan Options page, Scope tab.

Forecasting Profiles with Input Measures and Output Measures

In the Forecast Profiles region, specify which forecasting profiles to include as part of a demand plan. You cannot edit the input measure or output measure for a forecasting profile.

The following table lists the predefined forecasting profiles.

<table>
<thead>
<tr>
<th>Forecasting Profile Name</th>
<th>Input Measure</th>
<th>Output Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Shipments</td>
<td>Final Shipments History</td>
<td>Shipments Forecast</td>
</tr>
<tr>
<td>Forecast Shipments Including Event Activity</td>
<td>Final Shipments History</td>
<td>Shipments Forecast</td>
</tr>
<tr>
<td>Forecast Bookings</td>
<td>Final Bookings History</td>
<td>Bookings Forecast</td>
</tr>
<tr>
<td>Forecast Bookings Including Event Activity</td>
<td>Final Bookings History</td>
<td>Bookings Forecast</td>
</tr>
</tbody>
</table>

Analysis Set

An analysis set is an optional criteria used to apply a forecasting profile to a subset of a plan.

- If you don’t select an analysis set, then the forecasting profile applies to the full scope of the plan.
- If you select an analysis set, then the forecasting profile will be applied to only the subset of the plan scope defined by the analysis set.

For example, you have an analysis set containing a specific set of products, and you select that analysis set for a forecasting profile. The forecast will be generated for the specific products included in both the analysis set and in the plan, instead of for all the products in the plan.
Historical Buckets
Define the amount of historical data to use during the forecasting process. The statistical demand forecasting process uses the number of buckets in this field to define the amount of historical data used.

The historical bucket substantially affects the demand forecast generated when you run the plan. Use at least 12 months of history, but 18 to 36 months of history is best practice. When setting the historical bucket, keep the following in mind:

- Very long history affects plan runtimes and makes the forecast less relevant to current demand patterns.
- Less than one year of history affects seasonal analysis. This includes both yearly seasonality and holiday impacts.

The historical bucket setting is a maximum amount of history used when generating a forecast. The actual amount depends on the data available for a given item and organization. For each item and organization, the forecasting process identifies all available historical data, removes any leading zero demand prior to the first positive demand point, and generates a forecast.

History Start and End Dates
The plan definitions drive the history start date. History end date is calculated based on the end date and historical buckets.

Forecast Buckets
Indicates how far into the future a demand forecast will be generated and is driven by the planning horizon set for the plan.

Locked Forecast Periods
Indicates the number of buckets from end of historical data that will not receive a new forecast when you run the demand plan.

Forecast End Date
Indicates the end date that a forecast will be generated when you run the plan. The end date is based on plan horizon and the current plan start date.

Running a Demand Plan: Procedure
Run a demand plan to generate forecasts. When you run a demand plan, you can specify the scope of the plan that you want to run. You can decide whether to refresh the plans input data before running it. Also, you can run the plan immediately or you can run the plan in the background at a set time or on a repetitive schedule, such as daily or weekly.

After you create a plan, you must run the plan to generate the data. In the Run Plan dialog box, Parameters tab, run plan options are sequenced in the order of operations: data refresh, scope, and demand. The forecasting process runs first, and then the output is used for planning calculations. You can configure the following options for a demand plan:

- Data Refresh Options
- Scope Options
- Demand Plan Run Options

Data Refresh Options
The following data refresh options are available:

- **Do not refresh with current data**: Select this option to run your plan with no changes to demand, including no advancement of the plan start date. You also use this option for simulation planning.
• **Refresh with selected current data**: Select this option to partially refresh your data. You can refresh transaction data and some reference data without performing a full refresh.

• **Refresh with current data**: Select this option to refresh the complete plan with the latest collected data and advance the plan start date. If you are running the plan for the first time, this is the only data refresh option available and it is selected by default.

**Scope Options**

Select **Archive plan** to archive data from the plan.

**Demand Plan Run Options**

Use Demand Plan Run Options to generate a demand forecast. Select the forecasting profiles that you want to include as part of the plan. If you do not select a forecasting profile, then the demand forecasting process does not run.

**Forecast Profiles**: Select the forecasting profiles that you want to include as part of the plan. If you do not select a forecasting profile, then the forecasting process does not run.

**Include details of forecast methods**: Select to specify whether to provide details of the forecast methods that make up the forecast. You must select this option to view the resulting forecast decomposed by the forecasting method. Selecting this option increases the time required to run the plan.

**Include details of causal factors**: Select to specify whether to provide details of the causal factors that make up the forecast. You must select this option to view the resulting forecast decomposed by the causal factor group. Selecting this option increases the time required to run the plan.

**Running a Demand Plan**

To run a supply plan or an integrated plan, do the following:

1. Open the Run Plan dialog box:
   a. In the Navigator, click the Demand Management work area.
   b. Click the Plans panel tab and expand the Plans list.
   c. Select the plan that you want to run, click **Actions**, and then select **Run**.

2. In the Run Plan dialog box, Parameters, tab, expand **Details** to review the plan options:
   a. In the Data Refresh Options section, review the options and make appropriate selections.

   - **Note**: If you are running the plan for the first time, you must select **Refresh with Current Data**. This option refreshes historical data, imports sales orders, and advances the plan start date to align with the current date.

   b. In the Scope Options section, select **Archive plan** to archive the plan during the plan run.
   c. In the Demand Plan Options section, select the appropriate options, including the forecasting profiles that you want to include as part of the plan run.

3. To schedule running the plan, click the Schedule tab to set up the frequency parameters:
   a. To run the plan immediately, select **As soon as possible**.
   b. To run the plan in the background at a set time, select **Using a schedule** and then select a **Frequency**, such as Daily or Weekly.

4. Click **OK** to run the plan.
Forecasting Methods and Forecasting Using Demand Planning: Overview

Application supports the following forecasting methods:

- **Regression**: The classical regression model is useful in identifying seasonal demands and casual-driven effects of holidays and price.
- **Ridge Regression**: Regression which safeguards against one or more causal factors getting dramatically larger affects than others. It is often similar to regression.
- **Log Transformed Regression**: Regression on a log transformed demand pattern. Useful to smooth out variance which cannot be easily explained in demand. It is best suited for highly variable demand patterns.
- **Holt Exponential Smoothing**: Use this method for instances where the amount of data is limited, such as newly introduced products. It creates a level-driven forecast without seasonality or other causal factors.
- **Croston Method for Sparse Demand**: Use this method when a large amount of historical data is intermittent or spare. This method evaluates periodicity of demand.
- **Regression for Sparse Demand**: Useful for sparse demand where there are still some seasonal or causal driven impacts.

When you forecast using a demand plan:

- Each item-organization which has historical demand is analyzed separately.
- The analysis automatically removes any zero demand entries and fills the missing historical data.
- The analysis also identifies peaks and valleys in the history that are erroneous information or outliers.
- The forecasting process evaluates which of the predefined forecasting methods are most appropriate for analyzing the particular item-organization’s historical demand and selects one or more forecasting methods.

Working with Predefined Causal Factors: Explained

You use causal factors to understand the variation in historical demand and produce a highly accurate and adaptive forecast. You have 27 causal factors that you can use during the forecasting process to evaluate each item-organization and determine the impacts.

The causal factors include:

- 12 months of the year
- 7 days of the week when forecasting using daily data
- Trend
- Price
- 6 holidays (They include New Year’s, Thanksgiving, Christmas, and three placeholder holidays. You can use these to model any other holidays.)

*Note:* Except for Price, all causal factors have a dimension of Time only and do not vary by item and organization.
Modifying Causal Factors

You can modify and repurpose causal factors to meet the demand planning needs. Since all causal factors are on shared measures, changes to one plan’s causal factor values impacts other plans simultaneously. Typically, you load the causal factor data from a flat file and then modify as required.

To modify a causal factor:

1. Open a demand plan with history and horizon that matches the causal dates.
2. Create a table displaying the causal factor measure and relevant time period.
3. Modify the values of the causal factor and save. Next time you run any plan, the changes to the causal factor can impact the forecast.

Modifying Demand Exceptions and Overriding Demand Forecast: Explained

You open a demand plan and open the exceptions table to view the demand exceptions. The exception table shows any demand exception with at least one exception.

You can use the search capabilities to focus on specific areas of exceptions, such as:

- Exception Date
- Specification values
- Organization
- Product

Modifying Demand Exceptions

You can modify the threshold associated with each demand exceptions to meet your business requirements. In addition, you can also modify the data aggregation level at which the measure is evaluated. Typically, when you calculate at a lower level, an exception returns more occurrences for the same threshold than when set at a higher level.

The reduction in exceptions is tied to two factors:

- Less data points to evaluate at a higher level.
- A large amount of data variability and noise that occurs at lower levels is reduced in aggregation. Hence, it is recommended that the threshold and levels be set to the most business-meaningful levels. For example, if the primary use of forecast is to ensure enough is produced, then organization aggregation should be increased from organization to line of business.

Overriding Demand Forecast

Based on business information and intelligence, you can override the statistical forecast.

To perform a forecast override:

1. Open the relevant plan and open a table with the forecast measures.
   The table must contain the dimension and hierarchies that you want to view the data. You can use a table with several hierarchies and levels and collapse or expand a hierarchy until they see the relevant data aggregation.
2. Double-click the cell and enter the desired value to enter an override. When you navigate away from the cell, the calculated measure associated with the override measure changes immediately.

3. Click **Save**. Close the table without saving to discard any unsaved changes.

## Approving a Demand Plan: Explained

As a demand planner, you typically follow a weekly or monthly planning cycle. During this cycle, you can review different forecasts and try different scenarios in an effort to get to the most appropriate future projection of demand. After the cycle is complete, it is best practice to take a snapshot or archive forecast results so that it can remain static while the next forecast cycle begins. You can reuse the static forecast as an input for other processes.

In your Supply Chain Planning application, you can set aside the demand forecast and save using the Approve action. After a forecast is approved, the approved values remain unchanged until the forecast is approved again.

> **Note:** A plan approval is a recommended step, but not mandatory in the demand planning.

The following illustration is a visual representation of the demand planning process and shows how plan approval interacts.

### Changing Forecast Measures
- Final Shipments Forecast
- Final Bookings Forecast

### Fixed Forecast Measures
- Approved Final Shipments Forecast
- Approved Final Bookings Forecast

### Use the Forecast
- Supply Planning
- Safety Stock
- Other

Demand planning process typically includes running a plan, user reviewing the plan, and overriding. These steps can impact the Final Shipments Forecast and Final Bookings Forecast.

When you determine that a plan’s forecast is sufficiently complete for approval, you perform the Approve action. The approve action takes the data from the two final forecast measures and copies to Approved Final Shipments Forecast and Approved Final Bookings Forecast, respectively.
Understanding Plan Approval Process, Plan Attributes, and Plan Status: Explained

Use Oracle Demand Management Cloud to facilitate forecast reconciliation and agreement of cross-functional forecasts. With forecast reconciliation, you can view a forecast captured from cross-functional teams at both aggregate and detailed level.

Forecast reconciliation helps you do the following:

- Compare forecast at the plan level, show the variance over a period of time, or across different product segments.
- Use built-in exceptions, such as deviation between sales and final shipments forecast to reconcile the sales forecast with your estimates.
- Use user-defined exceptions and calculations to find more specific issues that fit your evaluation criteria.
- Use conditional formatting to identify which specific weeks or items have a problem at a glance.

The forecast review and approval process describes a flow where you can approve the forecast of a plan after you generate statistical forecast. You review and modify forecast as needed. After you validate the forecast, you can approve the forecast for the plan.

The approve action copies the forecast data to the designated approved measure and changes the plan status to approved.

Examples:

- In case of the Bookings Forecast, the approve process copies the data from the Final Bookings Forecast measure to the Approved Final Bookings Forecast measure.
- In case of the Shipments Forecast, the approve process copies the data from the Final Shipments Forecast measure to the Approved Final Shipments Forecast measure.

The approve action updates three approval-related plan attributes:

- The Approval Status attribute is updated to Approved.
- The Last Approved By attribute gets updated with the user name.
- The Last Approved Date attribute gets updated with the approve plan process date and time.

You can review the plan attributes from the Manage Plans page.

To reset the approval status of a plan: Navigate to the plan’s Actions menu, and select Reset Approval Status. This resets the Approval Status plan attribute.

> **Note:** To view the approve attributes columns in the Manage Plan screen: Navigate to the View menu, select the Columns options, and then Manage Columns. Add the following three attributes to the visible columns: Approval Status, Last Approved By, and Last Approved Date.

When do I run a demand plan?

You run a demand plan depending on your organization’s demand forecasting cycle, which is typically either weekly or monthly. You also run a demand plan when major changes have been made to historical data or causal factors, or when new products have been added.
Reviewing Plan Messages: Explained

In Supply Chain Planning, you can view root causes for technical plan process failures and the recommendations to fix the issues.

After running a plan, open the Review Plan Messages table to review the warning and error messages generated by the planning processes, such as forecast generation and supply plan generation. You can also review the recommendations to address the warning and error conditions. Access the plan messages from either the Manage Plans page or the Edit Plan page.

Plan messages are available for all plan types (for example, Supply Plan or Sales and Operations Plan types) and are accessible from your respective Supply Chain Planning work area. There are three message types:

- Warning: Indicates an issue that can result in a future run plan error if not resolved.
- Error: Indicates a plan failure.
- Recommendation: Indicates a recommendation to resolve a plan failure or how to achieve a better run performance.

If you repeatedly run the plan, the same messages appear on the Review Plan Messages tab for each plan run. The messages will have different process identifiers and submission times.

You can delete plan messages based on the submission date. On the Review Plan Messages tab, click the Purge button. In the Purge Messages dialog box, enter a submission date with one of the operators: Equals, Before, On or before, After, On or after, Between, or Not between.

Use the following steps to open the Review Plan Messages table from the Manage Plans page:

1. From a Supply Chain Planning work area, click the Task drawer and select Manage Plans.
2. On the Manage Plans page, search for a plan.
3. In the Search Results region, select a plan.
4. Click the Actions drop-down list and then select Review Plan Messages to access the Review Plan Messages tab.

From the Search Results region, you can export the messages to a Microsoft Excel spreadsheet.

Use the following steps to open the Review Plan Messages table from the Edit Plans page:

1. From a Supply Chain Planning work area, click the Task drawer and select Manage Plans.
2. On the Manage Plans page, search for a plan.
3. In the Search Results region, select a plan. Next, click the Actions drop-down list and then select Open.
4. On the Edit Plan page, click Open.
5. In the Open Table, Graph, or Tile Set dialog box, search for the Review Plan Messages table. Select the table and then click OK.
6. On the Review Plan Messages tab, click the Search button.
7. In the Search Results region, view the plan messages.

From the Search Results region, you can export the messages to a Microsoft Excel spreadsheet.

Related Topics
- Supply Chain Planning Plan Types: Explained
Archiving Plans

Plan Archival: Explained

Supply Chain Planning provides two archival types, one that a planner can run for a plan and another archive type that only an administrator with proper security privileges can set up for MAPE statistics. For a planner, plan archival enables you to archive measures in a plan with plan context and save multiple versions of a plan's archived measures over time. When you archive a plan, you archive a set of measures contained in the measure catalog that you chose as the archive measure catalog for the plan.

Note: You can create archives for demand, supply, integrated demand and supply, and sales and operations plans. Archival is not available for Oracle Planning Central Cloud.

Plan Archives

Plan archival enables you to save multiple versions of the plan where you archive the key measures at a point in time. The Waterfall Analysis and Trend Analysis tables and graphs use the plan archive to compare the current plan's data to past versions of the plan. When viewing past versions of the plan, you can see the impact of strategic and tactical changes made to the plan. You can also compare the individual archives to the plan by selecting Compare > Archive from the Actions menu in a plan.

For example, you archive a plan in May and then market conditions in September cause adjustments to be made to the plan. You can analyze the impact of the adjustments on the plan by viewing the changes in the key performance indicators between the plan version archived in May and the current plan.

A Supply Chain Planning planner can run the archiving process from an open plan by selecting the Archive option from the Actions menu. A planner can also run the archiving process by selecting the Archive option on the Run Plan page. Alternatively, you can run the archive process independently of running the plan by selecting the Archive option from the Actions menu on the Manage Plans page.

Before you can archive a plan, you must enable the plan for archiving and set up the archiving parameters. The parameters that you configure determine the time hierarchy, time level, and the measure catalog to use for the archives. Set up the archiving parameters in the Scope: Advanced Options dialog box, which you navigate to from the Plan Options page, Scope tab.

MAPE Archives

An administrator with the correct security privileges can create an archive for MAPE statistics by running the Build Plan Archive scheduled process from the Tools work area. Generally, a planner does not have the privileges to create a MAPE archive. However, an administrator with the required privileges can see the Enable for MAPE calculations check box in the Build Archive dialog box. The administrator can create archives at a week or month level.

Note: To calculate predefined measures for demand plans and sales and operations plans that use archived data, you must use a MAPE archive. The statistics calculated for the MAPE archive are used to generate the Waterfall Analysis and Trend Analysis tables and graphs.
Configuring Archiving Parameters: Procedure

Before you can archive plans, you must enable the archiving options.

라도: You can create archives for demand, supply, integrated demand and supply, and sales and operations plans. Archival is not available for Oracle Planning Central Cloud.

To configure the archiving plan options:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click Manage Plans, select a plan, and then select Edit Plan Options from the Actions menu.
3. On the Scope tab, click the Select Advanced Options button.
4. In the Scope: Advanced Options dialog box, select Enable for archiving.
5. Review and make changes to the archive parameters:
   - Select the calendar to use, set the archive time level.
   - Select the measure catalog to use when archiving.

라도: Oracle recommends that you create a measure catalog containing only measures that provide insight to the plan’s changes instead of archiving every measure in the plan.

6. Click Done.

Archival for Calculating MAPE Statistics: Explained

A Supply Chain Planning administrator with the Manage Rolling Archives security privilege can create archives for the calculation of the MAPE statistics at a week or month level. These archives are used to calculate predefined measures for demand plans and sales and operations plans that use archived data. The administrator runs the Build Plan Archive scheduled process from the Tools work area.

Shipments or bookings measures are required in the archive for MAPE statistics calculations, based on the measure used to create the forecast. If your plan forecasts shipments data, then only the shipments forecast measures are needed. If your plan forecasts bookings data, then only the bookings measures are needed. The following shipments or bookings measures are required:

- Final Shipments Forecast
- Final Shipments Forecast 3 Months Ago
- Final Shipments Forecast 3 Months Ago Latest Archive
- Final Bookings Forecast
- Final Bookings Forecast 3 Months Ago
- Final Bookings Forecast 3 Months Ago Latest Archive

To use the archives in a waterfall or trend analysis, select the Use MAPE calculations check box in the Selector Tool Comparison Options tab.
MAPE archives created on a rolling basis can be referenced in a user-defined measure expression that uses the Archive function. The archive type is a parameter of this function. The valid values for archive type are "Rolling" and "Adhoc."

Archival for Calculating MAPE Statistics: Procedure

A Supply Chain Planning administrator with the Manage Rolling Archives security privilege can create archives for the calculation of the MAPE statistics at a week or month level.

Perform the following steps to run the Build Plan Archive schedule process:

1. In the Navigator, under the Tools section, click the Scheduled Processes link to access the Scheduled Processes page.
2. Access the Process Details page for the Build Plan Archive process:
   a. On the Schedule Processes page, click the Schedule New Process button.
   b. In the Schedule New Process dialog box, click the Name drop down list, and then click the Search link.
   c. In the Search and Select: Name dialog box, enter Build Plan Archive and click Search.
   d. Select Build Plan Archive and click OK to return to the Schedule New Process dialog box.
   e. In the Schedule New Process dialog box, click OK.
3. In the Process Details dialog box, select the plan to archive and then click the Advanced button.
4. On the Parameters tab, select Do not delete archives or Delete archives automatically.
   If you select to delete archives automatically, enter a number in the Most Recent Days to Keep field. The archive process automatically deletes older archives based on this parameter.
5. Select the Enable for MAPE calculations check box and enter or select the following parameters:
   a. Archive Time Hierarchy: Select the calendar to use for the archive.
   b. Archive Time Level: Select the time level to use for the archive.
   c. Measure Catalog for Archival: Select the measure catalog to use when archiving.
   d. Use default archive name: Select to use the default archive name.
   e. Use user-defined archive name: Select to overwrite the default name with a user-defined name.
6. Click the Schedule tab to set up the frequency parameters.
   a. To run the plan immediately, select As soon as possible.
   b. To run the plan in the background at a set time, select Using a schedule. Next, select a Frequency, such as Monthly or Weekly, to create MAPE rolling archives for use in waterfall and trend analyses.
7. Click Submit.

Deleting Archives: Explained

A planner can automatically delete plan archives by setting parameters in the Scope: Advanced Options dialog box, accessed from the Plan Options page, Scope tab. Only a Supply Chain Planning administrator with the Manage Rolling Archives security privilege can delete MAPE archives. In the Tools work area, the administrator can use the Delete Plan Archive
schedule process to clean up unwanted archived data versions. You can delete the archives of a plan based on an archive version, a time range, or all archives for a plan.

**Note:** When you use the Delete Plan action, the process not only deletes the plan, but it also deletes all of the archive versions associated with that plan.

Perform the following steps to run the Delete Plan Archive schedule process:

1. In the Navigator, under the Tools section, click the **Scheduled Processes** link to access the Scheduled Processes page.
2. Access the Process Details page for the Delete Plan Archive process:
   a. On the Schedule Processes page, click the **Schedule New Process** button.
   b. In the Schedule New Process dialog box, click the **Name** drop down list, and then click the **Search** link.
   c. In the Search and Select: Name dialog box, enter **Delete Plan Archive** and click **Search**.
   d. Select Delete Plan Archive and click **OK** to return to the Schedule New Process dialog box.
   e. In the Schedule New Process dialog box, click **OK**.
3. In the Process Details dialog box, select the plan that you want to delete the archives for and then click the **Advanced** button.
4. On the Parameters tab, in the Plan section, select one of the following options, which are only available to administrators with the Manage Rolling Archives security privilege:
   a. Include MAPE archives
   b. Delete MAPE archives only
5. On the Parameters tab, in the Archive Parameters section, configure the following parameters:
   a. Archives to delete
   b. Delete archives with time range

The Delete Plan Archive process filters the selected archive parameters by which MAPE archiving option you selected in the Plan section.

6. Click the Schedule tab to set up the frequency parameters.
   a. To run the plan immediately, select **As soon as possible**.
   b. To run the plan in the background at a set time, select **Using a schedule** and then select a frequency, such as Monthly or Weekly.
7. Click **Submit**.
7 Generate Statistical Forecast

Generating Statistical Forecast, Understanding Causal Factors, and Decomposition Groups: Explained

Demand Management generates the statistical forecast based on the historical shipments, bookings, or both. You use the forecast to understand the variations in the demand using causal factors. On running a demand plan, the forecast is generated based on the forecasting profiles you applied in the plan. The forecast is automatically generated at individual combinations of Item and Organization. The analysis and analytical choices that you make can vary from one combination to another. You can create a statistical demand forecast profile or copy one of the predefined forecasting profiles using the Manage Forecasting Profiles tasks under the Demand Management work area.

Causal Factors and Decomposition Groups

You use causal factors to understand the variation in historical demand and produce an accurate and adaptive forecast. Casual factors are the demand drivers that explain the variation in demand. They can provide additional insights on how individual external factors impact and contribute to the forecast.

Decomposition groups are collections of causal factors that provide the ability to break down the total forecast into the distinct groupings of causal factors. Each decomposition group includes one or more measures. The measures are used by the demand forecasting process as causal factors. The results of the forecast are split into different decomposition groups. You can view how individual decomposition groups are analyzed in the history and understand their impacts on the forecast.

You have predefined decomposition groups that are part of your forecasting profile. You can edit your forecasting profile and configure for your business needs.

You also have the ability to modify the casual factors that are used in the forecasting profile. This provides a high degree of control in how the demand forecast analyzes historical demand, by incorporating a variety of inputs, which are relevant to your business.

Creating a Forecasting Profile: Explained

A forecasting profile is a collection of definitions used during the demand forecast generation process. Each profile includes the definitions of the forecasting methods used and at what level demand data is aggregated. The profile also includes the causal factors used to explain variations in demand and the groups they are assigned for decomposition purposes. Use the Manage Forecasting Profiles task to configure your forecasting profile.

You have two predefined forecasting profiles:

- Forecast Bookings
- Forecast Shipments

You cannot edit the definitions of these profiles, however you can use these profiles as a base when you create forecasting profiles. You can either create a statistical demand forecast profile or copy one of the predefined forecasting profiles. For best results, it is recommend that you to create a copy of an existing profile and modify for your use.
To view the existing forecasting profiles: Navigate to the Demand Management or Demand and Supply Planning work area, and click the **Manage Forecasting Profiles** task from the panel drawer.

To create a forecasting profile:

1. In the Navigator, click the **Demand Management** or **Demand and Supply Planning** work area.
2. From the **Tasks** panel, click **Manage Forecasting Profiles**.
3. From the **Actions** menu, click **Create**, and define the following details for the new forecasting profile:
   - **Profile Name**: Provide a unique name to your profile. Optionally, you can provide a description for clarity when you or other planners are selecting a profile to use in a demand plan.
   - **Forecasting Table**: Defines the data aggregation levels used in forecasting.
   - **Input Measure**: Select the measure that you plan to use as the historical demand basis for your forecast.
   - **Output Measures**: Select the measure that your forecast will be written to when you run the plan.
   - **Measure Catalog**: This drop-down list contains all available measure catalogs. Select all of the measure catalogs that you anticipate being associated with Plans that will use this forecasting profile.
4. Use the Forecasting Methods tab to configure the forecasting methods and their related values.
5. Use the Decomposition Groups tab to configure its details.
6. Use the Forecasting Parameters tab to configure the values for each parameter.
7. Click **Save and Close**.

### Configuring Forecasting Methods: Explained

Oracle Demand Management Cloud provides 15 forecasting methods. You can use one or a combination of these forecasting methods, while configuring your forecasting profile. You can control the forecasting methods using the forecasting profiles available in the Manage Forecasting Profiles page.

While you review a forecasting combination, the forecast methods measure shows you the methods used in the last execution of your forecasting profile.

The following table lists the fifteen forecasting methods and its associated letter combinations.

<table>
<thead>
<tr>
<th>Forecast Method</th>
<th>Representative Letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Regressive External Inputs</td>
<td>X</td>
</tr>
<tr>
<td>Auto Regressive Integrated Inputs</td>
<td>V</td>
</tr>
<tr>
<td>Auto Regressive Logistic</td>
<td>A</td>
</tr>
<tr>
<td>Causal Winters</td>
<td>B</td>
</tr>
<tr>
<td>Combined Transformation</td>
<td>E</td>
</tr>
<tr>
<td>Croston for Intermittent</td>
<td>F</td>
</tr>
</tbody>
</table>
When you use a forecasting method in your profile, the letter representing the forecasting method is written as part of the forecast output. For example: When using Forecast Shipments as the forecasting profile, the letters of forecasting methods is written into the Shipments Forecasting Methods measure.

### Configuring Decomposition Group: Explained

A decomposition group is a container for the measures that you use as causal factors. Causal factors enable several forecasting methods to understand the variation in historical demand and produce an accurate and adoptive forecast. Decomposition groups allow you to organize measures that have similar impacts and effects on a forecast. The definitions are also used when the forecast is decomposed into causal factors, when using the forecast decomposition run plan option.

For your forecasting profile, you can add, edit, or delete decomposition groups. You can also activate and deactivate a group using the check box against each groups. Selecting a group enables all causal factors associated with that group.

To create a decomposition group:

1. On the **Decomposition Groups** tab in your forecasting profile, click Actions, then New.
2. On the **Create Decomposition Group** dialog, do the following:
   - Provide a name and description.
   - From the **Available Measures** list, move the required measures to the **Selected Measures** list.
3. Click **OK**.

To configure the causal factors in a decomposition group:

1. On the Decomposition Groups tab in your forecasting profile, expand a decomposition group.

   The expanded list detail the available causal factors.
2. You can select the check boxes:

- Short: Use short for the methods that use a limited set of causal factors. These methods include Regression and Causal Winters.
- Long: Use long for the methods that use an extended set of causal factors. These methods include Monte Carlo Regression.
- Multiplicative: Use multiplicative in the Dual Group Multiplicative forecasting method.
- Not Seasonal: Assigns the causal factor for use by auto regressive models that detect seasonal and repeating patterns automatically.
- Fill Missing: Controls whether 0 values for the causal factor will be replaced by another value. Enable this setting for causal factors which always have values. For example, price.

### Configuring Forecasting Parameters: Explained

Forecasting parameters control the several aspects of a demand forecast such as, handling of missing values, outlier detection, fit and forecast validation, and sparse data forecasting.

You can improve the default settings based on your data analysis and forecast results.

The following table lists the commonly used forecasting parameters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FillMissingMethod</td>
<td>Specifies how to fill any undefined historical values. Parameter values may be 0, 1, 2. 0 for no missing values field. 1 for linear interpolation based on not missing neighbors. 2 for omitting missing values.</td>
</tr>
<tr>
<td>GlobalAllocationPeriods</td>
<td>Specifies the number of days to use for average demand calculation.</td>
</tr>
<tr>
<td>EnableNaiveForecast</td>
<td>Specifies whether naive modeling is used, and if so, what type. Parameter values may be 0 or a positive integer. Use 0 to disable naive modeling. 1 to use Oracle proprietary naive modeling. Any integer greater than 1 to use simple moving average with the value controlling number of historical periods used.</td>
</tr>
<tr>
<td>IntermitCriterion</td>
<td>Specifies the lowest percentage of zero values in historical demand for which the time series are evaluated using intermittent forecasting methods.</td>
</tr>
<tr>
<td>WriteFit</td>
<td>Specifies amount of historical forecast, or fit, persisted during the forecast process. Parameters values may be 0 or a positive integer. 0 to keep future forecast only. A positive integer to keep forecast for the last number of historical periods where the number is the positive integer. Definition of period can be daily, weekly, or monthly based on forecast calendar definition.</td>
</tr>
<tr>
<td>DetectOutlier</td>
<td>Specifies whether the engine should attempt to detect and smooth outliers in the time series.</td>
</tr>
<tr>
<td>OutlierSensitivity</td>
<td>Specifies the sensitivity of outlier detection. The greater the more liberal the detection. For common detection, use values less than 2.</td>
</tr>
<tr>
<td>RemoveExtremeOutlier</td>
<td>Specifies whether the engine should perform aggressive outlier smoothing. Enable this feature only if there is a clear cause to remove extreme values.</td>
</tr>
</tbody>
</table>
## Generate Statistical Forecast

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EnableFitValidation</td>
<td>Specifies whether to enable statistical fit validation. Yes to enable validation. No to disable validation.</td>
</tr>
<tr>
<td>EnableForecastValidation</td>
<td>Specifies whether to enable statistical forecast validation. Yes to enable validation. No to disable validation.</td>
</tr>
<tr>
<td>FitValidationSensitivity</td>
<td>Controls the sensitivity of fit validation. Forecast methods with MAPE greater than the specified value are rejected. The smaller the value the stricter is the validation. For loose validation use values between 1 and 2. For strict validation select values between .3 and .5.</td>
</tr>
<tr>
<td>ForecastValidationSensitivity</td>
<td>Specifies the sensitivity of forecast validation. The smaller the value, the stricter the test. For loose forecast validation use values between 5 and 10.</td>
</tr>
</tbody>
</table>

Additional forecasting parameters are available and you can include by selecting the **Actions** menu, and then the **Add** item. This provides a full list of all available forecasting parameters. Select the parameter you want, and click the **Add** button to include it in the forecasting profile.
8 Planning Measures

List of Predefined Measures for Supply Chain Planning: Explained

When you use one of the Supply Chain Planning work areas, you have access to many predefined measures. To review the details of each predefined measure, use the following:

- The Manage Planning Measures task
- A spreadsheet available at My Oracle Support

The Manage Planning Measures Task

On the Manage Planning Measures page, select a measure, and then select edit. You can review the details of the measure on the Edit Measure page even if you can’t make changes to the measure.

A Spreadsheet Available at My Oracle Support

Use Doc ID 2374816.1, Oracle Supply Chain Planning Cloud: List of Predefined Measures. The List of Predefined Measures spreadsheet contains only the core measure attributes. You can use the Edit Measures page to view all the attributes associated with a particular measure.

Managing Planning Measures: Explained

Use the Manage Planning Measures task to review the measures. There are several measures that you can edit and some are set to view only. You use the pivot table to view the data you edited at different aggregations. The results of the edits are stored based on definitions of a measure.

Use this topic for the following purposes:

- Updating the definition of a measure
- Updating aggregation parameters
- Updating disaggregation parameters
- Edit data of a measure

Updating the Definition of a Measure

To update the definition of a measure:

1. In the Navigator, click a Supply Chain Planning work area.
2. Click the Tasks panel tab.
3. In the Tasks panel, click the Manage Planning Measures link.
4. Expand a measure group and scroll manually or use the search option to find all measures that match the search criteria.

5. Click the measure you want to modify and click the Edit icon.

**Note:** Look for a check mark next to **Allow editing** at the top of the measure definition controls to confirm that the measure is editable.

6. Click the Aggregation and Disaggregation tab to view measure definitions.

   The dimensions, hierarchies, and levels at which data persists vary from measure to measure. For the dimensions with a check mark, the measure is defined on the current dimension. For these dimensions, each measure is defined on a single hierarchy as listed on the dialog box.

7. Click **Save and Close**.

### Updating Aggregation Parameters

Aggregation parameters control the way in which data of a measure is aggregated from the storage level to a table, graph, or infotile. Calculation Order allows you to choose between the following options: Calculate and aggregate or Aggregate then calculate. Calculate and Aggregate calculates the measure's expression at the lowest data level and then aggregates up. Aggregate and Calculate aggregates all measures referenced in the measure's expression and then calculates the expression.

### Updating Disaggregation Parameters

The disaggregation methodology is driven by the definitions of the disaggregation parameters. Disaggregation for definitions that include time can be different from disaggregation for definitions that do not include time. For noneditable measures there is no configuration in the disaggregation parameters.

The four different allocation methods are the following:

- **Same:** Indicates that all lower-level entries into which the data is being saved will receive the same value. Service level would be a good measure to use Same Value settings as the percentage being entered should not be allocated between different items and organizations.

- **Equal:** Spreads the edited value among the lower level entries into which data is being saved. Each entry receives an equal share of the update. This could commonly be seen on the time dimension, where data may be updated for a week or month, but there is no guidance on how it should be allocated to the common storage level of days. It is typically set to the time dimension to equal value to support equal allocation between the days.

- **Self:** Uses a measure's own pre-calculated values to allocate the data to the dimension member combinations. For example, item-organization. The weights for each combination are calculated and stored for the measure during plan run. These weights are used to allocate the data. For example, the forecasts for P1-Org1 and P2-Org1 are 40 and 60 respectively. Therefore the weights used for allocation would be 40% for P1-Org1 and 60% for P2-Org1.

- **Measure:** Uses values of a different measure to allocate.

### Editing Data of a Measure

To edit the data of a measure, open a pivot table containing the measure, double-click the cell where the data is to be entered, and enter the data. In a pivot table, editable and noneditable cells look similar. However, when you double-click a cell of an editable measure, the cell enables you to enter values.
Configuring Units for a Measure: Explained

You can view a measure in several units of measure (UOM) and currencies side by side without needing separate measures. By converting a single measure into various values and currencies, you get superior data consistency and do not require recalculation and data synchronization.

In addition, sometimes different products and organizations have data that is loaded externally using different units of measure. For example, vitamins sold in Europe may be shipped in bottles, while in Asia the quantities are by pill count. By defining units, you enable these values to be converted into a cohesive value, which can be aggregated in a seamless manner.

To configure units for a measure:

1. In the Navigator, click a Supply Chain Planning work area.
2. Click the Tasks panel tab.
3. In the Tasks panel, click Manage Planning Measures.
4. Locate the measure for which you want to configure units and click Edit.
5. On the Advanced tab, select the Properties tab.
6. Select UOM from the drop-down list as the default value for the Base Units of Measure.
   The base units of measure define the default unit of measure to which displayed data is converted. It is editable only for numeric measures, which do not have product and organization-based levels. For measures that have product and organization, the definition comes from the data source. When using the measure, you must attempt to select only the relevant UOM entries for the measure to streamline the user process.
7. Select the relevant units of measure from the Display Unit of Measure.
   You completed defining the unit of measure. You can view the measure using a specific table or graph.

iał Note: To show the same measure with different unit of measures, you can create a copy from the original measure. Rename the duplicated measure to use another unit of measure of your choice. You can show the same measure as both numbers and currencies.

To override the default UOM:

1. Open a table and select View, Format Measures to find the measure.
2. Click the measure you want to modify and select the value from the Unit of Measure drop-down list.
3. Click Save and Close.

Configuring Currencies for a Measure: Explained

You can view a measure in several units of measure and currencies side by side without having separate measures. By converting a single measure into various values and currencies, you get superior data consistency and do not require recalculation and data synchronization.

To configure currencies for a measure:

1. In the Navigator, click a Supply Chain Planning work area.
2. Click the Tasks panel tab.
3. In the Tasks panel, click the Manage Planning Measures link.
4. Locate the measure for which you want to configure currencies and click Edit.
5. On the Advanced tab, select the Properties tab.
6. Select Currency from the drop-down list as the default value for the Base Currency.

   The base currency defines the default currency to which displayed data is converted and is editable only for currency type measures.
7. Select the relevant currencies from the Display Currency.

   You completed defining the currencies for a measure. You can view the measure using a specific table or graph.

   The currency value is editable only if the measure type is Currency. For numeric measures, you can change the type from Number to Currency. Select the currency that you want to use in this instance of the measure.

   ✍ Note: To show the same measure with different currencies, you can create a copy from the original measure. Rename the duplicated measure to use another unit of measure of your choice. You can show the same measure as both numbers and currencies.

To override the default currency:
1. Open a table and select View, Format Measures to find the measure.
2. Click the measure you want to modify and select the value from the Currency drop-down list.
3. Click Save and Close.

Configuring Conditional Formatting for a Measure: Explained

Use conditional formatting to change the background color of a cell when a specific condition occurs. This is useful to draw the attention of the user for information that requires action. You define conditions for an individual measure. A measure can have one or more formats applied. The condition is evaluated at the table level using the configured units and currencies. Two tables with different units of measure or currencies defined can have different cells trigger the conditional formats.

To configure global conditions:
1. In the Navigator, click a Supply Chain Planning work area.
2. Click the Tasks panel tab.
3. In the Tasks panel, click the Manage Planning Measures link.
4. Locate the measure for which you want to apply conditions and click Edit.
5. On the Advanced tab, select the Conditional Formatting tab.
6. Click the + icon to add a row and complete the information.

<table>
<thead>
<tr>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure</td>
<td>Locate the measure you want to use to evaluate. Conditional format for a measure can be based on another measure.</td>
</tr>
<tr>
<td>Condition</td>
<td>Compares the selected measure to a value or another measure</td>
</tr>
<tr>
<td>Compare to Measure</td>
<td>Measure to which the selected measure is compared</td>
</tr>
<tr>
<td>Value</td>
<td>When the Compare to Measure is empty, this value is used to compare the selected measure</td>
</tr>
</tbody>
</table>
7. Click **Save and Close**.

To configure local overrides to conditions:

1. Open a table and select **View, Format Measures** to find the measure you want to modify.
2. Select the **Override Conditional Formatting** check box.
3. Select a new conditional format that you want to use in the table. The conditional formatting section appears.
   - The definition is the same as the global settings that include measure, condition, second measure, and value.
4. Click **Save and Close**.

### Importing Measure Data at Aggregate Levels: Explained

Use the Supply Chain Planning Measures template to import measure data. In Demand Management, you can allocate the loaded forecast measure data to the day level. In Sales and Operations Planning, you can allocate the loaded forecast measure data at the planning level as part of a snapshot. For example, if the Financial Forecast Value measure is loaded at the Quarterly and Product Category levels, then the measure data is allocated to the month and item respectively.

You can import measure data at the following aggregate levels:

- Category level in Product dimension
- Weekly for a Manufacturing Calendar in Time dimension. Monthly and Quarterly for a Gregorian or Fiscal calendar in Time dimension.
- Customer level in Customer dimension
- Business Unit or Legal Entity level in Organization dimension
- Division, Region, or Territory level in Sales Organization dimension

You cannot import data at aggregate levels for shared measures, such as Shipments History, Adjusted Shipments History, Bookings History, and Adjusted Bookings History.

**Related Topics**

- Using the Import Templates to Create the CSV Files for Supply Chain Planning: Explained

### Viewing the Audit Trail for a Measure: Explained

Use the Audit Trail of Measure Updates table to view the audit trail for a measure. The table displays details of changes made to measure values for auditing purposes. You can view the audit trail for all measure types, such as numeric, date, and string.

The Audit Trail of Measure Updates table is available for Demand Plan, Supply Plan, Demand and Supply Plan, and Sales and Operations Plan types. You can access the audit trail from your respective Supply Chain Planning work area.

Only editable measures that are part of the plan’s measure catalog appear in the Audit Trail of Measure Updates table.
Only the user who updated the measure can view the previous value and new value in the audit row. Other users, who have permissions to view the audit trail, must open the Audit Trail Details page to view the details.

The security permissions are set according to the job roles on a measure group or on a specific hierarchies, such as Item, Organization, Customer or Supplier. For additional details, open the Administer Planning Security page from the task drawer of the Plan Inputs work area.

Use the following steps to view the audit trail for a measure:

1. From a Supply Chain Planning work area, click the **Open** button and then select a pane.
2. In the Open Table, Graph, or Tile Set dialog box, search for the Audit Trail of Measure Updates table. Select the table and then click **OK**.
3. On the Audit Trail of Measure Updates tab, type a specific measure name and click **Search**. You can click the Search button without typing any search criteria to display all the measures that have the audit trails.
4. In the Search Results region, you can view the audit trails for a measure, which includes the following information:
   - **Measure Name**: Name of the measure on which the updates were made.
   - **Last Updated Date**: Date and time when updates were made to the measure.
   - **Updated By**: Name of the user who made the updates.
   - **Previous Value**: Previous value for the measure.
   - **New Value**: New value for the measure.
   - **Details**: When you click **Details**, the Audit Trail Details page opens. You can review additional details, such as levels, members, filtered levels, and filtered members.

Managing User-Defined Measures

Creating Measures: Explained

In addition to reviewing measures, you use the Manage Planning Measure task to create, edit, duplicate, and delete measures. You can also create measure groups and add predefined and user-defined measures in them.

This topic discusses the following:

- Creating measures
- Duplicating, editing, and deleting measures
- Creating measure groups
- Assigning measures to a measure catalog

Creating Measures

You can create measures with appropriate privileges if the predefined measures do not meet your business requirements. The measures that you create have the same features and functionality as predefined measures.

To create a measure:

1. In the Navigator, click a Supply Chain Planning work area link.
You can create measures from one of the following work areas: Demand Management, Supply Planning, Sales and Operations Planning, Demand and Supply Planning, or Plan Inputs.

2. Click the **Tasks** panel tab.

3. In the Tasks panel, click the **Manage Planning Measures** link.

4. Click **Create** from the Actions menu.

   a. On the Create Measure page, enter a measure name and description.

   b. Select a measure group.

   c. Select a data type.

   d. Select the **Allow editing** check box if you want the measure to be editable in a pivot table.

   e. Select **Edit Range**. This enables the Edit Lock tab, which controls the editable status of the measure.

      The Edit Range value determines the time range over which the measure is editable. The available values are: History, Future, History and Future.

   f. On the Aggregation and Disaggregation tab, define the dimension parameters. Select the dimensions, hierarchy, and hierarchy level within the dimension to store the measure data. When a dimension and hierarchy are selected, the default setting for the Stored Level is the lowest level of the dimension’s hierarchy. You can modify the level to store by selecting the hierarchy from the drop down and setting the stored level parameter within that hierarchy.

      - **Aggregation Parameters**: The Aggregation parameters control the way a measure’s data is aggregated. You have two options:

         o Calculate and aggregate: Calculate and Aggregate calculates the measure’s expression at the lowest data level and then aggregate up.

         o Aggregate then calculate: Aggregate and Calculate aggregates all measures referenced in this measure’s expression and then calculate the expression.

      In the Time Dimension field, select the aggregation function that controls how data is aggregated for the time dimension. The Other Dimensions fields are the same as the Time dimension fields. These options control how the data is aggregated across all the dimensions except for time. The Weighted By field is enabled only if you select Weighted Average as the aggregation parameter for either Time or Other Dimensions. It allows you to pick the measure to drive the weighted average calculation.

      The aggregation types include: Sum, Average, Weighted Average, Minimum, Maximum, Count, Latest, Median, Variance, and Standard Deviation.

      - **Disaggregation Parameters**: The Disaggregation Parameters control how changes to the data at an aggregated level are allocated down for storage. This is used when data changes are made in a pivot table, but also when made by the demand forecast. The weights for each combination, such as item-organization are calculated and stored for the measure during plan run. These weights are used to allocate the data. For example, the forecasts for P1-Org1 and P2-Org1 are 40 and 60 respectively. Therefore the weights used for allocation would be 40% for P1-Org1 and 60% for P2-Org1.

      The parameters for the Disaggregation Type field are: By Measure, By Self, Equal, and Same Value. The default parameter is Equal.

      The Disaggregation Basis field is enabled only if you select the Disaggregation Type as By Measure. Select the measure to use as the disaggregation basis from the list of measures.

      The Secondary Basis field is enabled only if you have selected the Disaggregation Type field as By Measure or By Self. The values for Secondary Basis are Booking History Average or Shipment History Average.
The Secondary Basis measure is selected in case the basis measure has no value. You can select only measures that contain pre-calculated proportions as a secondary basis. That is, they are calculated during plan run.

g. On the Expression tab, define any new expressions for a measure. You create an expression when you have to show any value other than its stored information. The expression provides a flexible framework for an extensive variety of calculations and information. An expression for a measure references other measures, operators, and numbers.

In the Expressions subtabs:

- The Functions tab lists the available functions, a description, an example of the function’s use.
- The Measures tab lists the available measures, their descriptions, and data type. The Insert button inserts the highlighted measure into the expression building area where functions or arithmetic operations can be specified.
- The Attribute tab lists the attributes available for the Product dimension at Item level. The description and data type of the attribute is shown in the description pane.

After you complete the expression, use the Validate button to ensure the syntax is correct. An error or succeeded message is displayed.

h. On the Edit Lock tab, you can define a new expression similar to the measure expression. The difference is rather than evaluating and displaying the expression result, the expression result is used to control or refine the editable status of the measure. If the expression evaluates as true, the measure is locked from editing. The expression is evaluated every time the table is run, and may change as relevant measures or attributes are modified.

i. On the Advanced tab, click the Properties tab and review the following parameters:

- If you select the Shared measure check box, then the measure is shared across plans. By default, the parameter is not selected and hence the measure is plan specific.
- If you select the Refresh with current data check box, then the current measure value needs a placeholder to store the result in the application. For example, a non-editable measure where the data is imported from a legacy or other application. Selecting this check box allocates a space to store the measure by the defined dimensions.
- Conversion Type allows you to define the valid Unit of Measure (UOM) and Currency conversions that will be available for a measure in a table.

Base Units of Measure defines the default unit of measure used to convert displayed data. The field is editable only for Numeric measures, which do not have Product and Organization-based levels (for measures that have product and organization, the definition comes from the data source). Select any relevant units of measure, which may be useful in a table, graph, or tile. Only the UOMs that you select will be available for selection in a table or graph.

Base currency defines the default currency to which displayed data are converted. The field is editable for only Currency type measures.

You use Price lists to convert quantities into values, which are then converted to a currency.

- Data Lookup value allows you to identify a data lookup source that displays the measure as a list of value. The source attributes have 3 options: None (Default), Level, and List.
  - If Source=Level, you need to identify the level and the attribute to display in the measure drop down.
  - If Source=List, then you can create and maintain the list of values. You can either add or remove members in this list.
 Assigning Measures to a Measure Catalog

To use the user-defined measure in your plan, add the new measure to the plan’s measure catalog. Navigate to Configure Planning Analytics, find the plan’s measure catalog on the Measures Catalog tab. In the Available Measures pane, search for the new user-defined measure, and add it to the Selected Measures. After you perform a plan run you can create a table or use an existing table, and add your new measure to the table.

 Duplicating, Editing, and Deleting Measures: Explained

You can duplicate, edit, and delete user-defined measures using the Manage Planning Measures task, which is available in the Tasks drawer.

To duplicate the measure: Select a measure from the list of measures, select the Action menu on the toolbar, and then click **Duplicate**. Duplicating the existing measure gives you a starting point for creating a new measure definition. When you duplicate a measure the default name is Copy of <original measure name>. Other definitions of the duplicated measure remain the same as the original measure.

To edit the measure: Select a measure from the list of measures, select **Actions** menu, and then click **Edit**. Editing a measure allows you to select an existing measure and edit its attributes.

To delete the measure: Select a measure from the list of measures, select **Actions** menu, and then **Delete**. A complete list of all objects including tables and measure groups are be displayed to ensure you are aware of impacts of deleting a measure.

Creating Measure Groups: Explained

Use Manage Planning Measures task to create a measure group. Measure groups are created to group measures together that you need frequently. Depending on your business need you can create measure groups and associate measures with appropriate groups.

To create a measure group:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click the **Tasks** panel tab.
3. In the Tasks panel drawer, click the **Manage Planning Measures** link.
4. Click **Create Group** from the **Actions** menu.
   - Enter a name and description.
   - From the Available Measures pane you can select measures and move to the Selected Measures pane.
5. Click **Save and Close**.

You can also create Measure Groups in the Selector tool when you create or edit a table or graph. In the Group field in the header section, select **Manage Groups** from the list of values. Use the plus icon, +, to add a row, type a name, and click **Save**.
Configuring Global Goals for Measures: Explained

You can define global goals for a measure using the Goals tab when you create or edit a measure. On the Create Measure page, click the Advanced tab and then the Goals tab to configure global goals.

Define if low or high values are better. For example, a high value is good for revenue; a low value is good for expenses.

For global goals, you can provide a low range or a high range.

Goals option is available only for measures of type Currency, Number, and Percent. Using Global Goals, you can first define if low or high values are better for a measure. The ranges are displayed on the page when you are viewing a measure in comparison with its goal, for example, in an infotile. Global goals are measure level parameters and are not defined specifically for a subset of the data. For example, you cannot have a goal of 1000 for one organization and 50000 for another.
9 Capture Business Insights

Capturing Business Insights: Overview

Use Oracle Social Network to capture demand information and inputs within your organization. By capturing forecasts from your organization, you can get different perspectives of the forecast that can help you drive a collaborative demand planning process.

Some of the example scenarios where you can use collaboration capabilities are the following:

- Sales, marketing, and other stakeholders can manually enter or upload their forecast. They can also enter a forecast by using their mobile devices. You can add such details at any level in the hierarchy. For example, the sales department can enter a forecast to a customer account and item level, while the marketing department can enter data at the product category and month level.
- Demand planners can start a social conversation with a focus group to get qualitative insights in a specific business context.
- Participants in the demand management process can annotate the data with notes to document changes and assumptions.

The planner workbench integration with Oracle Social Network provides enterprise-wide visibility for the entire planning flow for a specific plan. It also provides collaboration with other team members and management, facilitating the identification of areas requiring action to meet the business objectives.

If you have Oracle Social Network enabled, click the Social icon to collaborate on a specific plan with other users. You can see the Social icon when you open a plan. You can also click the Social icon for any general conversation from the planner workbench.

Managing Notes in Supply Chain Planning: Explained

Use Notes in Supply Chain Planning to document and communicate important information about your plan. You can use notes to provide reasons for any changes made to a plan or to record decisions and assumptions that led to those changes. You can save these notes for future reference or to provide details to other users. Participants in the plan management process can annotate the data with notes to document changes and assumptions.

Notes functionality is available in the Demand Management, Supply Planning, Planning Central, and Sales and Operations work areas. You can create notes for the following:

- Plans
- Planning level members, such as items, organization, and customers
- Planning combinations, such as a specific item-organization-date-measure combination
- Exceptions

When you create a note, you must specify a note type. Note types enable notes to be categorized, which you can use as a search criteria. The following lists the predefined note types:

- General
- Assumption
• Decision
• Issue
• Possibility
• Risk
• Reference
• Special

You also specify whether the note is private or public. Private notes are visible only to the user who created the note. Public notes are visible to all the users with whom the object is associated.

From the Demand Management or the Sales and Operations work area, you can access the Notes table to display planning level members for Product hierarchies. You can create a layout to view the Notes table as part of the layout instead of as a dialog box. The Notes table is not available for Supply Planning or Planning Central.

Notes for Plans
You can create notes for plans. When you copy a plan, any notes associated with the plan are copied into the new plan.

To create a note for a plan, do the following:

1. Open the Plan Options page for your plan and click the Manage Notes icon.
2. In the Manage Notes dialog box, click Actions > Add.
3. In the Add Notes dialog box, add your notes.
4. Click OK.
5. Click Save and Close.

Notes for Planning Level Members
You can associate notes with planning-level members, such as items, organizations, and customers. You can create notes at any level of the hierarchy, such as on an individual item, on a brand, or on a product category.

Notes that you create on planning level members at lower levels in the hierarchy are visible when you open Manage Notes from an aggregate level. Notes that you create on level members are not plan-specific. This means that a note associated with a level member is visible from any plan that contains that member.

To create a note on a level member, click Create Note from the Actions menu.

To view, edit, or delete an existing note, select the level member, click Manage Notes from the Actions menu.

Notes for Planning Combinations
You can associate notes for the planning combinations, such as a specific item, organization, date, and measure combination. Planning combinations appear as cells within a table.

You can create a note at any level; however, they are only visible at the level at which they are created. For example, if you create a note at a brand, month, and measure combination, you cannot view that note at the item, day, and measure level.

If you copy a plan, then any plan-specific notes on planning combinations are also copied.

To create a note for the planning combinations, do the following:

1. Select the associated table’s cell in the table.
2. Click Create Note from the Actions menu.
3. Add your notes.
4. Click **Save and Close**.

To view, edit or delete an existing note on a planning combination, do the following:

1. Select the **Note** icon from the table's cell level.
2. Click **Manage Notes** from the Actions menu.

> **Note:** If you create a note on a planning combination and the associated measure is shared across plans, then the note is not plan-specific. In this case, the note is visible across all plans. If you create a note on a planning combination and the associated measure is not shared across plans, then the note is plan-specific. In this case, the note is visible within the plan in which you created it.

### Notes for Exceptions

You can associate notes for exceptions. Notes on exceptions persist across plan runs. If an exception still exists after a plan is run again, then any notes associated with the exception are retained. When an exception is resolved, the exception is removed from the application. In that case, any notes associated with the exception are also removed.

To create notes for an exception, do the following:

1. Click the **Note** icon on the table row of the exception.
2. Add your notes.
3. Click **Save and Close**.
10 Forecast Configure-to-Order Products

Forecasting Configure to Order Products: Explained

In Configure to Order (CTO), you can select the base product at the time of ordering the product and then configure the different features of that product from the different available options. The various options or components are manufactured to stock and based on the customer order, the end product is then configured to order.

Forecasting for CTO is a two-level planning problem. You first create forecast models and then derive demand for options or features for those models based on attach rates also called as planning percentages. You can use existing attach rates specified in the bill of material, add them manually or predict attach rates based on the historical trend in options’ mix. The models' demand, option's model-dependent demand, and options' independent demand are calculated when you generate the statistical forecast and when you run the plan on-demand. You can calculate them in real time when you modify demand for base model, option demand or attach rates. A bill of material view shows the model, option classes and options in a hierarchy, along with the associated forecast.

A classic example for a CTO product is laptop, where manufacturers make different components to stock. For example, hard disk, monitor, RAM, processor, and so on are make-to-stock components. You can later select the various component options and configure the model of the laptop based on the order requirements.

Your selections of the components of the product must be anticipated to ensure the correct mix of components are available. This is one of the challenges in planning demands for CTO products.

Collecting Configure to Order Data: Explained

To plan configure to order (CTO) products and their options, you collect the shipment history or booking history. You use the Collect Planning Data page in the Plan Inputs work area to configure the CTO data in the demand plan.

Follow these steps to enable CTO options during the data collection process:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click the Tasks panel.
3. Click the Collect Planning Data link from the Tasks drawer.

   The Collect Planning Data task can be accessed from all the work areas except Order Promising.
4. On the Collect Data page, in the Parameters tab, select the Source System, and change the Collection Type parameter to Targeted.
5. Click the Demand Planning Data tab.
6. On the Demand Planning Data tab, select the time frame collection options, and one or more history measures to collect.
7. In the Additional Options section, you can locate the following check boxes for CTO data.
   - Include shipment history for options
   - Include booking history for options

   Select the check box that is relevant to the history measure that you selected in the previous step.
When you select these check boxes in your Collect Planning Data task, the collections process reviews the Bill of Material in Product Information Management, and creates the structures for Demand Planning.

**Using Configure to Order Options: Critical Choices**

Use the Configure to Order Options in Plan Options to view configure to order products and their options. You must select the **Include dependent demand** check box in the **Advanced Options** dialog box, which you access from the Plan Options page, Demand tab.

The configure to order process uses attach rates to explode independent demand down to the different levels of the bill of material (BOM).

The following are the two attach rates:

- **Historical Attach Rate**: This rate is calculated based on the ratio of historical independent demand and the dependent demand.
- **Existing Attach Rate**: This rate is calculated based on user entered information in Product Information Management.

When you select the **Include dependent demand** option, the following additional parameters that control the planning percent history calculation get enabled:

- **Planning Percentage History Periods**
- **Planning Percentage Calculation Measure**
- **Planning Percentage Calculation Level**

**Planning Percentage History Periods**

The Planning Percentage History Periods control the length of history that is used when calculating historical attach rates.

**Planning Percentage Calculation Measure**

The Planning Percentage History Calculation measure controls the measure that is used to calculate the planning percentage history.

The following are the two options:

- **Options Shipments History**
- **Options Bookings History**

Select the option that is relevant to the history measure. For example, Options Shipments History is used with Shipments History.

**Planning Percentage Calculation Level**

The Planning Percentage Calculation level controls the aggregation level of data used when calculating the historical attach rates.
Review the following choices and select the one that matches your business requirements:

- **Item**: This option aggregates the historical demand by item and calculates the planning percentage at the item level. Selecting the option results in an item having the same planning percentage for all organizations and demand classes.

- **Item and organization**: This option aggregates the historical demand by the combination of item and organization. The option calculates the planning percentage at the combined item and organization level. Selecting the option results in each unique combination of an item and organization having a different planning percentage.

- **Item, Organization, and Demand Class**: This option aggregates the historical demand by the combination of item, organization, and demand class. The option calculates the planning percentage at the combined item, organization, and demand class level. Selecting the option results in each unique combination of an item, organization, and demand class having a different planning percentage.

### Predefined Tables for Configure to Order Products: Points to Consider

You can use two predefined tables to view configure to order products. You can also create your own table from these tables or use these tables for reference.

#### Analyze BOM Model, Option Demand: Customer, Item, Month

Use this table to view the finished product and underlying bill of material (BOM) structure in the context of customer.

The table displays the following:

- Final Shipments History
- The underlying forecast for option classes and options

You can view both types of planning percent values and select between them. Any changes made to the forecast and planning percent are propagated throughout the BOM in real time.

#### Analyze BOM Model, Option Demand: Organization, Item, Month

Use this table to view the finished product and underlying BOM structure in the context of organization.

The table displays the following:

- Final Shipments History
- The underlying forecast for option classes and options

You can view both types of planning percent values and select between them. Any changes made to the forecast and planning percent are propagated throughout the BOM in real time.

### Filtering Tables by Configure-to-Order Model: Explained

For plans with pivot tables that include configure-to-order items, you can turn on and off a page filter to select a specific configure-to-order base model. Use this filter to focus on the data for a single base model and its options, and to page
through the data in a table by configure-to-order base model. This filter is available in demand plans for tables containing data for configure-to-order items in the Demand Management and Demand and Supply Planning work areas.

You determine the following:

- Whether the page filter for configure-to-order base models is on or off
- Which value to filter by when the page filter is on

Turning the Page Filter On and Off

In the View menu, you select the Set Page Filter to Base Model option to turn the page filter on. When the page filter is on, the base models that you selected to include in the table when you created the table, are available in the page filter. You can then view the data for one base model, and its options, at a time.

You deselect the Set Page Filter to Base Model option to turn the page filter off. When the filter is off, all the base models included in the table, and their options, are visible in the table. You scroll down through the table to see each base model.

If you save a table layout with the Set Page Filter to Base Model option selected, then the page filter will be available the next time you use the table.

Selecting Which Value to Filter by When the Page Filter is On

In the field for filtering by the configure-to-order base model, you see the list of base models for the data in the table. These are the configure-to-order base models you chose when you created the table. You pick one model at a time to display the pivot table again showing just that base model and its options and option classes. You change your selection to page to the data for a different base model.

**What's the difference between Existing Planning Percentage and Historical Planning Percentage?**

Existing planning percentage is based on the user input in the Bill of Material source, which is often Product Information Management. Historical planning percentage is based on the average use of particular options as part of the base model in recent history.

Historical planning percentage calculation is done during plan execution. If you modify the independent or dependent demand values, these planning percentage values will not be modified until the plan is run again. The data aggregation at which historical planning percentage calculations are done are demand class, item, or item and organization.
11 Forecast New Products

Forecasting New Products: Explained

Using Oracle Demand Management Cloud, you can launch new products for a combination of customers and organizations, and forecast them based on the history of a similar selling products.

Demand Management enables you to do the following:

- Forecast new products based on history of a similar product or directly use the forecast of a similar product.
- Make volume adjustments and specify the percentage of history or forecast needed to meet the product launch requirements.
- Configure product launch by setting the launch date, the customer zones or specific customers, and product categories or specific items.
- Use the New Product Introduction summary analysis to gauge the contribution of new product revenue to the overall product portfolio.
- Collaborate to fine-tune the new product forecast.

By forecasting new products and collaborating with other stakeholders, you can better align inventory, launch products successfully, and prevent out of stocks.

New Product Introduction: Explained

Use the New Product Introduction functionality to generate a forecast for a new product when no history exists. This functionality provides you with the ability to predict initial demand and associated supply requirements for a new product.

From the Manage Product Launch page, you can:

- Select an existing source product to represent the historical sales to copy to the new product so that the demand engine can generate a forecast.
- Add the new product that is for all customers or is for a specific customer.
- Specify a date when the product is available for sale or specify start and end dates for seasonal products.

By specifying a product launch date, every time new data is collected, the demand engine copies the updated information from the source product to the target product up until the launch date.

- Apply a factor to increase or decrease the historical reference sales based on the expected sales of the new product.

To set up a new product so that you can generate a demand forecast for it, perform the following steps:

⚠️ Note: Before you begin, ensure that the new product exists in the product database. You add the new product through collections.

1. Open a demand plan or a supply and demand plan.
2. Open a table that has a product level.
3. Select a product in the Item column, click Actions, and select Manage Product Launch from the drop-down list.
4. On the Manage Product Launch page, click Actions, select Add, and then do the following:
   a. Select a source product to use as the reference for the new product.
   b. Select the new product to be introduced. (The product must already exist in the product database.)

5. On the Source Relation tab, do the following:
   a. Select the customers and organizations from the source product that you want to use to drive the forecast for the new product. When done, click Insert.
   b. Select or deselect the Copy Selected check box.
      - If selected, the organization, site, and historical data from the source product is copied to the new product.
      - If not selected, only the new product, organization, and site information combination is copied to the new product. You can then specify a relationship and manually manage the forecast for this combination.
   c. Enter a launch date.
      Every time new data is collected, the forecast engine copies updated historical data from the source product to the target product up until the launch date.

6. On the Measures tab, do the following:
   a. Select the source and target measures.
      Data will be copied from the source measures in the source product to the target measures in the new product.
   b. Enter a factor percent to increase or decrease the historical reference sales based on the expected sales of the new product.
      For example, you expect new product XYZ to sell 1.5 times more than existing product ABC, so you would enter a factor of 150%.

7. You can enter multiple lines of source and target measures on the Measures tab. When done, do one of the following:
   - Click Save and Close.
   - To save the set of measures for future use with other new products, click Save Measure Copy Set.

   ✍️ Note: To use the saved set of measures for other new products, click Apply Measure Copy Set.
Simulate Forecast Scenarios

Simulating Forecast Scenarios: Overview

Simulating forecast scenarios help in evaluating different scenarios by changing the demand plan parameters, causal factors, or configuration of a forecasting profile. Simulation enables you to change almost any input to the forecasting process, and in near real time, see what impacts it would have on the results. When you run a forecast in simulation, the forecast may be assigned different output measures. This allows you to view the results of your complete plan run side by side with simulation results.

You can select up to six output measures on the Simulate Demand page. Simulation results are stored in these measures instead of the measures the complete plan forecast is using. In most cases, you modify the Forecast Measure selection to review the results, without altering other settings such as, forecast level, forecast methods, and decomposition information.

Simulation is run on the members of a table or graph. You can run the simulation on all the members of the table or graph, or restrict the execution to certain members based on the selected Scope option:

- Table or Graph: Generate a forecast based on the population of the table or graph.
- Table with Pivot Filter: Generate a forecast based on the pivot table filter.
- Table Selection: Generate a forecast on only the selected table members.

Simulation is also the best way to quickly create new forecasting profiles, modify some of their definitions and view the output side by side with established forecasting profiles. If the new results look like an improvement you can then modify the established forecasting profiles as needed.

You have two sets of predefined output measures. They are by the name Simulation 1 and Simulation 2, and other output measures begin with the word Simulate. You can create additional measures based on these measures to support additional scenarios.

**Note:** If multiple users are conducting simulations using the same forecasting profiles and modifying the profile, each users changes can impact the other user. It may be best for different users who are running simulations to each have their own forecasting profile. You can create a new forecasting profile based on an existing profile by duplicating it. Use the Duplicate icon available on the Simulate Demand dialog.

You can use simulation in the following scenarios:

- Run unlimited number of forecast simulations to review impacts, such as changes in the price, running a marketing campaign, shift in weather, and demand upside request.
- Simulate how changes to forecasting models and parameters have an immediate impact on the statistical forecast.
- Simulate changes to attach rates or change the independent option forecast for configure to order items.
- Simulate the impact of introducing new products in particular geographic areas.
- Perform side by side analysis of any number of scenarios and review the impact on operational and financial objectives.
Running Simulate Demand: Explained

Use this topic to understand how to simulate forecasts using Simulate Demand. Selections to run simulate demand are valid for different use cases. Hence, for faster results you should select the specific options.

Simulation provides you with an easy way to view the results of different scenarios side by side. To accomplish this you need to ensure that your scenarios have a different output measure. You can do this by modifying the output measure each time you run a simulation or create several profiles you use for simulation purposes and execute each scenario using a different profile.

To run simulate demand:

1. In the Navigator, click the Demand Management work area link.
2. On an open table in the plan, click the Actions menu, and then click Simulate Demand.
3. On the Simulate Demand page, perform the following:
   a. Select the details for the forecast generation, forecast methods and causal factors.

      When you run a plan you may select whether you want to see the forecast decomposed into more detailed information based on forecasting methods and causal factors. The same options are available when running simulation and these options can provide substantial value in simulations where a targeted part of the plan receives a forecast. Note that adding more details increases forecast generation runtimes but this should not be impact for relatively small simulations.

   b. Review the parameters in the other tabs.

      For example, review and activate the forecasting methods from the Forecasting Methods tab.

4. Click the Simulation Output tab, select the output measures parameters and add to table, as required.

   From the Output Measure parameters, select the Forecast Measure, the measure to which the forecast will be stored. The other selections for measure are primarily useful when you are performing more detailed forecast analysis and diagnosis.

   The Add to Table check box controls whether the measure is automatically added to the table when you run a simulation. This streamlines the process for viewing simulation results by adding any new measure to the table.

5. Click Save and Run.

   Once simulation run is complete, you can review the revised configuration side-by-side with previous forecasts.
13 Forecast Analysis and Approval

Multidimensional Editing and Analysis: Explained

Multidimensional editing and analysis provide you the flexibility to view plan data at any aggregation relevant to your business. You can perform plan analysis using one or more of the following methods:

- View and interact with data at any level
- View aggregated data
- Update disaggregation data
- Configurable data disaggregation
- Drill and Drill To
- View summaries

View and Interact with Data at Any Level

You can filter the data in tables and graphs and make data adjustments that are automatically disaggregated to the data storage level. When you save the changes, the changes are available real time to all other users of the plan who can view and interact with the data at the levels that are most useful for their roles.

View Data in Aggregation

Viewing aggregate data in tables and graphs, inline drilling and Drill To capabilities lets you navigate and explore more relevant data as needed. For example, in a time dimension, a hierarchy might be used to aggregate data from the Day to Week, Period, Quarter, or Year. You can view data in a table at aggregate levels of the dimensions’ hierarchies selected during the table’s definition. The data is automatically aggregated to the levels visible in the table.

Update Disaggregation Data

In a table, you can update data at any level of an editable measure. When the changes are saved, the edits made at an aggregate level are allocated down to the lower levels. Edits at lower levels are aggregated up to the higher levels.

> Note: The term disaggregation and allocation are used interchangeably.

Configurable Data Disaggregation

A plan provides you the ability to control how data is aggregated and disaggregated as part of configurable measure definitions.

The disaggregation methodology is controlled by the Disaggregation Parameters. To update the Disaggregation Parameters for an editable measure, navigate to the Manage Planning Measures page in the Demand Management work area.
The following are the four different methods for allocating and persisting modified data:

- By Measure: Divides the value among underlying members using the underlying weights of the members for a specified measure.
- By Self: Divides the value among underlying members using the current values of the same measure.
- Equal: Divides the value equally among the underlying members.
- Same value: All underlying members receive the value that you have entered.

The weights for each combination of dimension members in a measure are calculated and stored for the measure during plan run. These weights are used to allocate the data. For example, the forecasts for P1-Org1 and P2-Org1 are 40 and 60 respectively. Therefore the weights used for allocation would be 40 percent for P1-Org1 and 60 percent for P2-Org1.

The disaggregation method that you selected impacts the way in which updates are allocated and stored. Oracle recommends that you review aggregation and disaggregation methods together to ensure they are synchronized.

Drill and Drill To

Drilling gives you the ability to expand and collapse the selections in a table and graph. It enables access to both aggregate and detailed views. You can also use drilling on a graph to drill from a higher level to lower levels. When you create a graph, multiple levels of a dimension’s hierarchy are selected and the drill option is enabled on the Layout tab. When you view a graph, the most aggregate level is shown first. You can click the level to drill to other levels to view additional information.

Use the Drill To functionality to navigate to the linked tables and graphs from a table or a graph. When navigating to a linked table or graph the context of the originating table or graph is used as a filter. Drilling from one object to another is configured in the Manage Links menu. You can drill between graphs, between tables and graphs, and between tables to view the data.

View Summaries

Use summaries to view summary information for all levels in the table. You can configure the summaries using the Configure Summaries action in the View Menu on the table toolbar. You can enable or disable summary rows on a specific level or for all levels selected in the table. Summaries can be displayed on rows and columns depending on the location of levels in the table.

Summaries are calculated using the Other Dimension Aggregation Parameter defined for the Measure. Measure aggregation for summaries in a table uses the aggregation parameters selected for the measure in the Manage Planning Measures page.

When creating a measure, you can use Sum, Average, Maximum, Minimum, Weighted Average, Count, Latest, Median, Variance, or Standard deviation as an aggregation function.

Note: The Table Summaries are updated automatically when you change the content in a cell.

Related Topics

- Creating Tables, Graphs, Analysis Sets, Tiles, and Tile Sets in the Demand Management Work Area: Explained

Analyzing Forecast Accuracy: Explained

You analyze the overall performance of a plan by measuring the forecast accuracy. You can use mean absolute percentage error (MAPE), mean absolute deviation (MAD), and forecast bias to measure the forecast accuracy.
MAPE

MAPE is a measurement of the percentage difference between the actual value (actual shipments) and the statistical forecast. The higher the MAPE value, the larger the difference, which demonstrates a high degree of forecast error. MAPE calculations are the central basis of forecast error analysis and you can use it for statistical, loaded, and manually entered forecast measures.

Predefined measures to display MAPE are the following:
- Final Bookings Forecast 3 Month MAPE
- Final Shipments Forecast 3 Month MAPE

Bias

Bias is an indicator that supplements MAPE and describes whether the demand is typically higher or lower than the forecast. The Bias function calculates the percent difference between two measures. When the Bias value is positive the demand is greater than the forecast. When the Bias value is negative, then the demand is lower than the forecast.

Predefined measures to display Bias are the following:
- Final Bookings Forecast 3 Month Bias
- Final Shipments Forecast 3 Month Bias

MAD

The MAD function calculates the absolute difference between two measures. Unlike MAPE, which is a percentage value, MAD is a unit value which may be harder to use across an enterprise. It represents a useful value in evaluating areas where forecast and demand differ. Value of MAD is calculated in units, it has no direct indication of accuracy. A product selling a thousand units a day may have a MAD of 100 and be accurate, whereas another product selling an average of ten units a day would be inaccurate with a MAD of 7.

Predefined measures to display MAD are the following:
- Final Bookings Forecast 3 Month MAD
- Final Shipments Forecast 3 Month MAD

Waterfall Analysis: Explained

Use waterfall analysis in a table or graph to compare key measures in the current plan with the archived versions of the measures. Select the Create a waterfall analysis check box from the Comparisons Options tab when you are creating or editing a table or graph. After you select the check box, select the Measure Archives to Use. You can select any number of archives.

Select the Use MAPE calculations check box to use the archives created by your Supply Chain Planning Application Administrator on a scheduled basis. These archives contain the measures required to calculate the Mean Absolute Percentage Error. If the check box is deselected, then archives created by the planner are used.

Select the Automatically display waterfall analysis check box when you want to automatically display the table or graph in the waterfall format. The waterfall format includes the archived versions of the measure in the table or graph. If the check
box is deselected, then the table or graph displays without the archived version of the measures. In such cases, the Analysis icon on the table or graph toolbar is used to display the waterfall analysis.

Tip: When you view a graph for waterfall analysis, hovering on a bar displays the data label for the measure or archive.

## Trend Analysis: Explained

Similar to waterfall analysis, trend analysis is also configured in the **Comparison Options** tab when you are creating or editing a table or graph. Trend Analysis allows you to select the number of previous archived versions of the measures to include in the table or graph.

For example: In trend analysis, if the plan was archived twice a week for the past two weeks, you can select the previous 4 archives to view. In case of waterfall analysis, you could only view two archives: those created a week ago, and two weeks ago.

If the **Automatically display trend analysis** check box is not selected on the Comparison Options tab, click the Analysis icon on the toolbar of the table or graph, and select **Trend Analysis**. The trend analysis table or graph opens in a new tab.

## Comparing Demand Plans: Explained

You can compare a demand plan with another demand plan or an archive of the same plan, and show the difference between them by selecting a metric.

Compare aggregate plan metrics: You can compare two plans and understand what changed at an aggregate level. For example, you can compare metrics, such as Revenue, Demand at Risk, and Exception Count. The comparison of plans in a table displays the data for each plan side-by-side. To see the differences between the plans, you can select the metrics in the Comparison Options tab when creating or editing the table. The Show Difference icon in the table or graph toolbar redraws the table or graph with the selected difference metrics.

The comparison metric options are the following:

- Difference
- Percent Difference
- Absolute Percent Difference

To compare a plan:

1. In the Navigator, click the **Demand Management** work area.
2. From the Actions menu, select **Compare**, and click **Plans**.
3. On the Search and Select: Plan dialog, search and select the plan that you want to compare with the current plan, and click **OK**.

You can view the table with both plans displayed.

Tip: Click the **Graph** icon on the toolbar of the table to view the results in a graph.

4. Click **Show Difference** to view the difference between the current plan and the comparison plan.
To stop comparing the plans, select the **Cancel Compare** from the **Actions** menu.

## Understanding Forecast Levels: Explained

You can define the data aggregation level at which the forecast is generated. For example, at the detailed level of item and organization or at the aggregate level of product category and customer. Based on the forecast configuration and data, you can generate a forecast at one of the several levels. Identifying the aggregation level at which forecast is generated can help you understand the resulting forecast for your business decisions.

The data aggregation levels at which forecasts are generated are derived from the Forecasting Table definitions selected for the forecasting profile. The table definition determines the first aggregation level and the subsequent levels that are used in a forecast.

The following predefined tables are used as the forecasting tables for the predefined forecasting profiles:

- Forecast Shipments Definitions
- Forecast Bookings Definitions

The data aggregation level at which a combination’s forecast is generated is stored in a measure specific to that forecasting profile. A value of 1 denotes the first aggregation level, 2 is the next higher level, and so on.

Predefined measures enable you to view the average forecast levels for product categories. Categories with higher forecast levels indicate that forecast is typically failing at the first attempted level.

## Identifying and Viewing Outliers: Explained

Outliers are extreme demand points in historical demand that you cannot explain using the forecasting process. The forecasting engine removes historical demand data, such as shipments and bookings to detect outliers, and replaces the missing data to minimize forecast error. In such instances the forecasting methods can adjust historical demand and smooth extreme data points. The forecasting process also marks the points which were smoothed.

Understanding where outliers occurred can help in forecast analysis. You can do this using various reports and mark outliers for review in tables and graphs.

Detailed plan outlier reports display history and smoothed outliers. The reports enable you to easily identify the following:

- The percentage of forecast combinations having outliers.
- The number of combinations where outliers are detected and smoothed.
- Average number of outliers found in a combination.

Predefined layouts that you can use for viewing outliers are the following:

- Bookings Forecast Outlier Analysis
- Bookings Forecast Outlier Details
- Shipments Forecast Outlier Analysis
- Shipments Forecast Outlier Details

In addition, you can add the measures showing outlier values to any table or graph that shows historical demand. This can help you understand how historical demand was modified during the forecast.
Analyzing Forecast Decomposition: Explained

Forecast decomposition provides insights on how the forecast was generated. It details various components that had come together to form a single forecast.

The two types of forecast decomposition are the following:

- Method forecast decomposition
- Causal forecast decomposition

Method Forecast Decomposition

Use Method forecast decomposition to see results for the individual forecast methods.

To enable Method forecast decomposition: Select the Include details of forecast methods check box in the details section during the run plan. After you run the plan, you can view the final combined forecast side by side with the individual method’s forecast.

You can then determine the forecasting methods that meet your expectations and can disable forecasting methods which you do not find appropriate. In the same view you can see the weights assigned to each forecast method and understand how the combined forecast was generated.

Causal Forecast Decomposition

Use Causal forecast decomposition to see the individual causal groups for a specific forecast method. A forecast can be composed of various factors, but not limited to seasonality, holidays, and price. This capability actually breaks down the forecast method’s forecast into subcomponents which together add up to the total forecast.

The method with which the demand forecast is broken down into components is driven by a grouping of causal factors called Decomposition Groups.

To view causal decomposition information: Select the Include details of causal factors check box during the plan run.

The results of forecast decomposition are stored in two additional dimensions.

- Demand Forecast Method: This dimension contains the various forecasting methods that are used. Any view pertaining to the different methods forecast should include this dimension.
- Decomposition Group: Causal decomposition is stored using both Demand Forecast Method and Decomposition Group. When viewing causal decomposition make sure to include these dimensions.

Related Topics

- Configuring Decomposition Group: Explained
Glossary

dimension
A data category used to organize business data for retrieval and preservation of values. Dimensions usually contain hierarchies of related members grouped within them. A dimension categorizes and describes measure data. For example, a measure named Price might be categorized by Product and Time, so that the price of items can be tracked over time.

measure
Contains data that is organized by the measure’s dimensions. For example, measures named Price and Forecast with the dimensions Product and Time would contain price data and forecast data for each product and time period.

planning data repository
The set of data collected from source systems and stored for use by order management, order promising, and supply chain planning processes.

planning percentage
Planning percentage is the value that you use to define quantity of options required for an end product.

work area
A set of pages containing the tasks, searches, and other content you need to accomplish a business goal.